

The Omnichannel Pharma guide *State of GEO & Omnichannel*

FOREWORD

Why this guide exists

Over the past twelve months, pharma has crossed a line. Google rankings no longer decide who gets heard when a drug is discussed — the synthesis layer of Perplexity, ChatGPT, Claude, Gemini and AI Overviews does. Patients ask these engines their questions. So do physicians. According to the [American Medical Association](#), 66% of US physicians now use AI in practice — a 78% jump in a single year. [Pew Research](#) reports that 22% of Americans now turn to AI chatbots for health questions — and 32% of 18–29 year-olds.

This guide documents — brand by brand, campaign by campaign, persona by persona — how the global pharma industry produces omnichannel content, and how visible (or invisible) that content actually is inside generative engines. It is the editorial counterpart to Pharma Guide v1, which mapped brands, indications and pipelines. Here we look at the other side of the equation: marketing, the brand website, the TV spot, the patient community, the LinkedIn KOL ad, the organic TikTok.

The angle is consistent: **every asset is read through the GEO / AI-visibility lens**. Which brand is citable by an LLM? Which FAQ is extractable? Which patient story is invisible because it lives only as video? Which HCP hub is a walled garden? The scoring grid is explicit (Part 2). Anti-patterns are documented. Best practices are named.

How to read this guide

You can read it end to end — 9 parts, 100+ pages, dense. Or dip in by brand (Part 3), by campaign (Part 4), or by persona (Part 7). The glossary and brand index make navigation fast.

Callout legend

IN PLAIN ENGLISH

Plain-language take on a technical concept, written for non-specialist readers. Use these in brand-team briefings or Steering Committee decks.

GEO FACT SHEET

A formal GEO score with a five-dimension analysis grid. Compact format for fast audits of a site, a hub, or a single asset.

THE CONSULTANT'S TAKE

Strategic perspective — what an Aikka consultant working at this company would actually say. Reading between the lines on the GEO competitive landscape.

WATCH OUT

Anti-pattern, regulatory risk, or GEO false friend. Do not reproduce with your own clients.

BEST PRACTICE

Example identified in the market — to reproduce, adapt, or cite in a meeting. A sourced, factual reference.

Sources and methodology

The 40 brands were the subject of direct patient, HCP and corporate site audits (June 2025 – May 2026). Campaigns are drawn from official Cannes Lions Health, PM360 Trailblazer, MM+M, Fierce Pharma Marketing Awards, Clio Health, and Shorty Awards rankings. Personas are inferred from patient surveys, FDA PFDD reports, Nature and JCO papers, and patient associations (NEA, CFF, NORD, EURORDIS). Names are fictitious; behavioural profiles are built by reasoned inference from real sources.

Every link in this document is clickable. Every image is a real screenshot or visual collected directly from the publisher (iSpot.tv, Fierce Pharma, YouTube, Wikimedia, official sites). No AI-generated imagery is used.

CONTENTS

Navigating the guide

Foreword

PART 1	The 2026 landscape — a panoramic view of omnichannel pharma
PART 2	The GEO-Readiness framework — 6 dimensions, 22 best practices, 22 anti-patterns
PART 3	Audit of the 40 brands — detailed fact sheets by therapeutic area
3.1	Oncology (10 brands)
3.2	Immunology / dermatology / rheumatology (9 brands)
3.3	Cardio-metabolic (7 brands)
3.4	Neurology & rare disease (7 brands)
3.5	Vaccines & infectious disease (4 brands)
3.6	Ophthalmology & rare hematology (4 brands)
PART 4	Top award-winning campaigns 2023-2026 and trends
PART 5	HCP medical content — portals, webinars, MedComms
PART 6	Social, video, influence, patient communities
PART 7	Patient & HCP personas by therapeutic area
PART 8	Consultant's synthesis — Top 10 / Bottom 10 / Roadmap
PART 9	Appendices — Glossary, brand index, references

PART 1

The 2026 landscape

"The generative engine is not an evolution of SEO. It is a paradigm shift: you no longer compete to be clicked, you compete to be cited."

— Wil Reynolds, Seer Interactive

The tipping point is behind us

The pharmaceutical industry is facing a structural shift. Patients and physicians now consume medical information through generative engines — ChatGPT, Perplexity, Gemini, Claude — that synthesise and return answers without a click. Brands that fail to appear inside those synthesised answers become invisible to their most engaged audiences.

Key figures 2025–2026

66%	of US physicians use AI in clinical practice AMA, 2025
+78%	growth in physician AI usage in a single year AMA, 2025
51%	of HCPs now use generative AI Digitallya / Impiricus, 2026
91%	of physicians demand to know who authored AI medical content Wolters Kluwer, 2024
22%	of Americans use AI chatbots for their health Pew Research, 2025
32%	of 18–29 year-olds use AI chatbots for their health Pew Research, 2025
+40%	LLM visibility uplift achievable with citations + stats + direct language Princeton GEO, arXiv 2311.09735
>80%	of AI traffic goes to pages updated within the last 2 years Seer Interactive, 2025

Mapping the omnichannel pharma landscape

Pharma marketing in 2026 spreads across seven principal channels, each with vastly different GEO visibility. The matrix below maps — for each channel — its budgetary weight in the industry and its citation potential in LLM answers. The conclusion is striking: **the channels where the industry invests the most (DTC TV, congresses, walled HCP gardens) deliver the lowest LLM visibility.**



Pharma channels × GEO/AI visibility matrix (Aikka 2026)

THE CONSULTANT'S TAKE

The central pharma paradox of 2026: budgets remain concentrated on the channels that LLMs do not read. US DTC TV is an 8 billion dollar/year line item, yet transcripts are rarely published. Medical congresses (ASCO, ESMO, AHA, ADA, EASD) absorb millions of marketing dollars but posters and oral presentations only exist for LLMs through third-party recaps (FiercePharma, Endpoints). The HCP walled garden — Janssen Medical Cloud, MerckConnect, Lilly Pro — is mechanically invisible. The strategic window of 18–24 months consists of shifting a share of those budgets toward public, structured, citation-ready content.

BEST PRACTICE

Sanofi 'Chasing the Miracles of Science' (2025, agency VML) is an excellent example of a corporate campaign that maximised LLM citability: media coverage (FiercePharma, MediaPost, Campaign US) generates third-party backlinks and structured mentions. Sanofi.com hosts in parallel the Nadine patient page with extractable narration. The result: Sanofi is now cited by LLMs as a 'patient-centric corporate pharma' on transversal queries.

The three structural tensions of 2026

1. Compliance vs. visibility

FDA OPDP sent more than 100 warning letters to pharma companies in September 2025 ([McGuireWoods, 2025](#)). EMA is developing the ePI (Electronic Product Information) standard on FHIR — precisely the format LLMs can ingest. Pharma therefore lives this tension: produce rigorous content *and* make it citable.

2. Patient vs. HCP — the dual-audience dichotomy

Pharma brands serve two audiences with different languages, channels and legal obligations. GEO content structure must reflect that dichotomy: a plain-language patient hub plus a scientific HCP hub. Brands that blur the two (Tagrisso, Verzenio, Cosentyx) produce content that is less citable than those that keep them cleanly separated (Dupixent, Keytruda, Lynparza).

3. Local vs. global — regulatory fragmentation

The same medicine carries different indications, packaging and labels under FDA, EMA, HAS, NICE and PMDA. Aggressive geo-blocking (a blank page in France for a US product) is the cardinal GEO anti-pattern. The best players (Dupixent FR, Sanofi global) handle this via hreflang and local adaptation, not via blocking.

What follows — PART 2 formalises the PharmaGEO GEO-Readiness framework across 6 dimensions, with its 22 best practices and 22 anti-patterns. This grid is the reference tool to analyse any brand, any hub, any piece of content.

PART 2

The GEO-Readiness framework

GEO vs. SEO — the silent revolution

Generative Engine Optimization (GEO) denotes the set of practices used to optimise a brand's visibility, accuracy and citability inside answers generated by LLMs. Formalised in the [Princeton paper, arXiv 2311.09735](#), GEO demonstrates that a source's visibility can be lifted by up to +40% through citations, statistics and structured language. AEO, AIO and LLMO are alternative terminologies — they all converge on the same discipline.

	Classic SEO	GEO
Goal	Appear at the top of the SERP	Be cited inside the AI answer
Metric	Ranking, CTR, traffic	AI Signal Rate, Share of Answer
Click	Indispensable	Optional — the AI represents you without a click
Content	Keywords, density, backlinks	Extractability, clarity, FAQ
Stability	Relatively stable	Volatile: 40–60% of sources change every month
Wikipedia	Useful	Major LLM credibility signal
Freshness	Important	Critical: >80% of AI traffic goes to pages <2 years old

IN PLAIN ENGLISH

The golden rule of GEO: if your content cannot be *extracted and summarised in 2–3 sentences by an LLM*, it will not exist in generative answers. That's it. Everything else follows from that constraint.

The 6 dimensions of pharma GEO-Readiness

The Aikka / PharmaGEO framework decomposes the GEO maturity of a brand into six dimensions, weighted by the relative importance of each lever inside the LLM answers observed on pharma queries.

D1	Narrative clarity & extractability Descriptive H1/H2/H3 hierarchy, short paragraphs, direct answers, defined jargon, quote-ready sentences.	20%
D2	FAQ & Q/A structure FAQ block 10 questions, schema.org FAQPage, real patient/HCP questions, long-tail queries.	15%
D3	HCP depth & scientific accessibility Partially public HCP hub, PI in HTML, MOA in text + annotated diagram, pivotal trials linked to PubMed.	20%
D4	Authority & freshness signals Named medical reviewer, publication + revision dates, PubMed/DOI citations, schema.org MedicalWebPage.	20%
D5	Multilingual & multi-geo Localised versions (FR, DE, UK, JP), human translation, correct hreflang, no aggressive geo-blocking.	10%
D6	External citability & authority Maintained Wikipedia, patient-association partnerships, STAT/Endpoints coverage, CME platforms.	15%

Score interpretation

0–30	Invisible — non-extractable content, critical score
31–50	Weak — marginal GEO visibility
51–70	Average — partial presence, quick wins identifiable
71–85	Good — structured GEO strategy, maintenance required
86–100	Excellent — brand cited regularly, leadership position

The pharma GEO-readiness pyramid

The GEO-Readiness Pyramid — 6 dimensions

Technical foundation at the base · Compliance overlays every layer



Pharma GEO-readiness pyramid (Aikka 2026) — each level prerequisites the next

The GEO-readiness pyramid translates the 6-dimension grid into an investment hierarchy. The foundation (robots.txt, sitemap, SSR) is *technical* and inexpensive. The middle layers (FAQ, MOA in text, reviewers, transcripts) require an editorial structuring effort. The upper layers (Wikipedia, partnerships, open access, disease awareness) are strategic and commit the organisation over a 12–18 month horizon.

22 Best Practices observed in pharma

These 22 best practices come from the field audit of 40 brands. They are ordered from the technical foundation (BP-15 sitemap, BP-16 robots.txt, BP-17 SSR) to the long-term strategy (BP-18 Wikipedia, BP-20 disease awareness, BP-21 CME).

BP-01	Patient hub + HCP hub kept separate BUT accessible Two distinct hubs with no mandatory login — the Dupixent model.
BP-02	Structured FAQ with long-tail queries 15 Q/A + schema.org FAQPage — the native LLM format.
BP-03	MOA in text + annotated diagram with 200+-word alt text Direct answers to 'how does X work?' queries.
BP-04	Transcribed patient stories (not video-only) A video without a transcript is invisible to LLMs — the Hemlibra model.
BP-05	Patient communities referenced and reciprocally linked NEA, NPF, CFF, NORD as authority backlinks.
BP-06	Inline medical glossary Citable definitions for terminology queries.
BP-07	Plain Language Summary of pivotal trials Reading grade 8 — the AstraZeneca Open Innovation model.
BP-08	Named authors and medical reviewers with credentials Strong E-E-A-T signal + schema.org Person.
BP-09	Distinct indication-specific pages Dupixent: separate /eczema, /asthma, /nasal-polyyps pages.
BP-10	Decision tools / calculators in accessible HTML Crawable, indexable, citable.
BP-11	Open access to scientific publications PubMed Central indexable — the AstraZeneca model.
BP-12	Patient pathway + treatment-centre locator Direct answers to 'how do I find a specialist?'.
BP-13	ISI/SmPC clear, non-obstructive, well-structured 30% of the page — organised by H3 headings.
BP-14	Human-quality multilingual + local adaptation Mention HAS / Ameli / NICE depending on market.
BP-15	Public, complete, up-to-date XML sitemap Submitted to GSC, Bing, declared in robots.txt.
BP-16	Allow AI crawlers in robots.txt GPTBot, ClaudeBot, Google-Extended, PerplexityBot.
BP-17	Server-side rendered site (SSR) Content readable without JavaScript — partial invisibility otherwise.
BP-18	Active Wikipedia stewardship The LLM tiebreaker — neutrality respected.
BP-19	Proactive media coverage (STAT, Endpoints, Reuters Health) High-authority domains crawled regularly.
BP-20	Unbranded disease-awareness sites Model: 'Could It Be ATTR-CM?' — Pfizer.
BP-21	Integration with accredited CME platforms Medscape, ESCMedEd — HCP authority.

BP-22

Breadcrumb navigation + structured internal linking

AI crawlers traverse the site like a decision tree.

22 Anti-patterns to avoid at all costs

Anti-patterns are the practices that mechanically cancel GEO visibility. Some (walled garden, geo-block, hCaptcha) are technical decisions that can be reversed quickly. Others (untranslated jargon, video-only, marketing FAQ) are cultural and require an editorial shift.

AP-01	Total HCP walled garden All HCP content behind login — complete invisibility.
AP-02	PDF prison PI, SmPC available only as PDF, not OCR'd.
AP-03	Video-only storytelling Patient stories, MOA, KOL without transcripts.
AP-04	Aggressive geo-block 'Not available in your region' = double penalty.
AP-05	Cosmetic marketing FAQ 5 promotional questions — zero signal.
AP-06	Unexplained patient jargon 'JAK-STAT pathway' without definition.
AP-07	Mega-PI dump PI copied with no H2/H3 structure.
AP-08	ISI Box colonising 50% of the page The LLM extracts mostly the ISI.
AP-09	No named medical reviewer Negative E-E-A-T signal.
AP-10	Geo redirects that penalise the crawl The crawler gets an empty page.
AP-11	Poor or absent Wikipedia No credibility anchor for the LLM.
AP-12	Missing schema.org markup Content treated as generic.
AP-13	MOA locked inside Flash/legacy animation Completely invisible to LLMs.
AP-14	Patient pages written as a medical manual Reading grade 16 — LLMs do not cite.
AP-15	HCP pages written as patient marketing Lacks rigour — not cited by HCPs.
AP-16	Pure SPA JS site without SSR Content invisible to AI crawlers.
AP-17	Missing or incomplete sitemap FAQ/Studies pages not discovered.
AP-18	Block GPTBot/Claude in robots.txt Voluntary invisibility.
AP-19	Duplicate content across indications LLM duplication penalty.
AP-20	Links to paywall only The LLM cannot verify the claims.
AP-21	Missing Drug structured data No formal identification.

AP-22

Exclusive reliance on WebMD/Vidal

Brand becomes a secondary mention, loss of narrative control.

The pharma paradox: compliance vs. GEO visibility

Pharma is probably the only sector where content production is governed by MLR (Medical-Legal-Regulatory) cycles of 4 to 8 weeks. That constraint is culturally and structurally opposed to the *freshness* LLMs demand (>80% of AI traffic goes to pages under 2 years old, per Seer Interactive). The paradox resolves through three strategies already observed among leaders.

Strategy 1 — Unbranded disease awareness

Launch a site centred on the disease rather than the product. Freed from the FDA OPDP / ANSM constraints on Rx promotion, that site can maintain a rich FAQ, publish KOLs, and partner with patient associations. Model: Pfizer 'Could It Be ATTR-CM?' (PfizerForAll/ATTR-CM).

Strategy 2 — Hybrid public/gated architecture

A first public layer (factual, indexable information: disease, mechanism, general criteria) plus a second gated layer for promotional HCP content. This preserves OPDP compliance while remaining crawlable. Model: dupixenthcp.com (Sanofi/Regeneron).

Strategy 3 — Patient-association partnerships

Associations (NEA, CFF, NORD, EURORDIS, France Assos Santé) publish far more freely than pharma brands. A transparent editorial partnership with clear disclosure is both compliant and GEO-powerful. Model: Vertex + the CF Foundation for Trikafta.

WATCH OUT

FDA OPDP — heightened vigilance 2025–2026

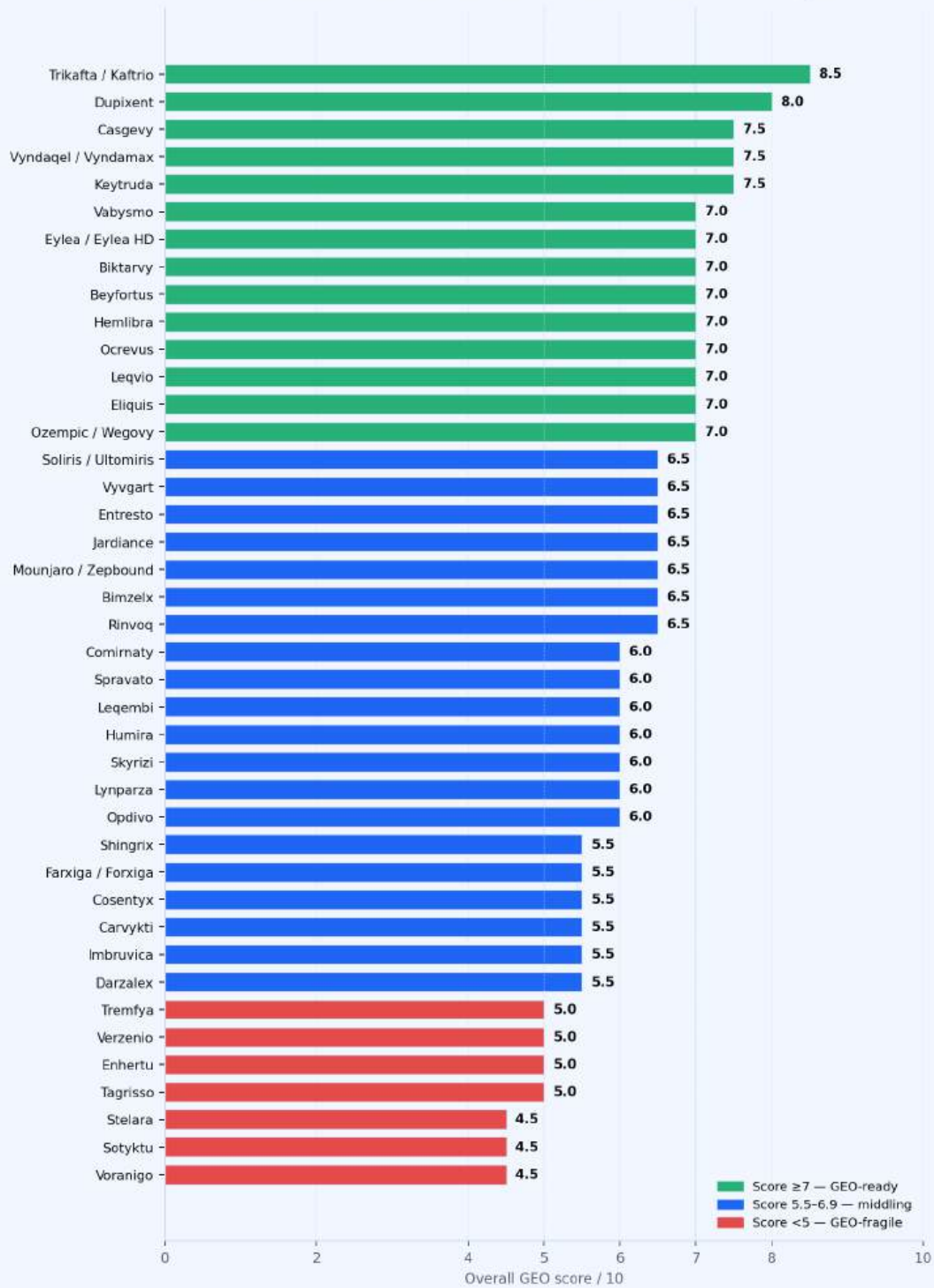
In September 2025 the FDA sent more than 100 warning letters to pharma companies for misleading advertising, including social activities and influencer partnerships. Off-label promotion, insufficient *fair balance*, and incomplete disclosures are the leading motives. Every piece of GEO content must pass the OPDP filter — but you can be GEO-friendly AND compliant.

PART 3

Audit of the 40 brands

This part is the heart of the report. Each brand has been audited directly — patient sites, HCP sites and corporate sites — between June 2025 and May 2026. The GEO-Readiness score (/10) results from the grid broken down into 5 sub-scores (narrative clarity, FAQ, HCP depth, authority/freshness, multilingual) — a simplified version of the 6-dimension framework introduced in PART 2. Each fact sheet presents a screenshot of the site, a consultant analysis and actionable recommendations.

GEO scores of the 40 audited brands (ascending)



GEO-Readiness scores of the 40 pharma brands 2026 (Aikka / PharmaGEO audit)

3.1 — ONCOLOGY

3.1 — Oncology

This section covers 10 major brands in oncology. Average score: 5.5/10.

Keytruda — Merck / MSD

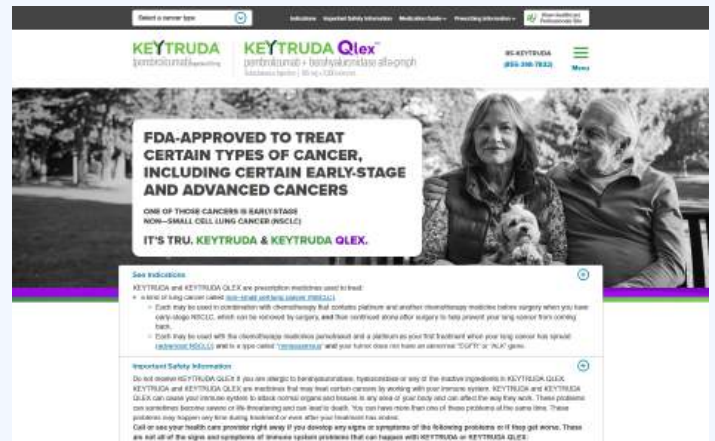
Immuno-oncology — 44 FDA indications across 19 cancers · keytruda.com / keytrudahcp.com

GEO SCORE

7.5 /10

Narrative clarity	<div style="width: 75%;"><div style="width: 75%;"></div></div>	1.5/2
Q/A FAQ	<div style="width: 25%;"><div style="width: 25%;"></div></div>	0.5/2
HCP depth	<div style="width: 100%;"><div style="width: 100%;"></div></div>	2.0/2
Authority / Freshness	<div style="width: 75%;"><div style="width: 75%;"></div></div>	1.5/2
Multilingual / Geo	<div style="width: 100%;"><div style="width: 100%;"></div></div>	2.0/2

Source: <https://www.keytruda.com>



GEO STRENGTHS

- Unmatched indication breadth (44 approvals) — a natural source for any LLM query on PD-1 immunotherapy
- Mechanism of action expressed in directly extractable text (PD-1 / PD-L1 pathway blockade)
- Deep HCP content with no login wall and 30+ named KEYNOTE trials

GEO WEAKNESSES

- No structured FAQ with schema.org markup — a major extractability gap
- No named medical reviewers and no visible update dates — weak E-E-A-T signal
- Video-only MOA content with no text transcript

THE CONSULTANT'S TAKE

Keytruda is the benchmark for publicly accessible scientific depth. Its 44 indications and 30+ KEYNOTE trials make it a natural citation source for LLMs across immuno-oncology. The main gap — and the ceiling on its GEO score — remains the missing structured FAQ and weak E-E-A-T signals.

BEST PRACTICE

Actionable recommendation. Quick win: add a structured FAQ block per indication with FAQPage schema. Mid-term: name the medical reviewers and systematically date every page.

Opdivo — Bristol Myers Squibb

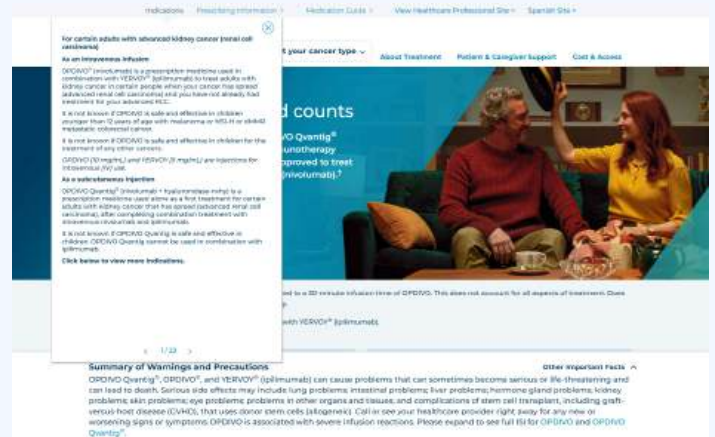
Immuno-oncology (anti-PD-1) — multi-indication · opdivo.com / opdivohcp.com

GEO SCORE

6.0 /10

Narrative clarity	<div style="width: 20%;"></div>	1.0/2
Q/A FAQ	<div style="width: 25%;"></div>	0.5/2
HCP depth	<div style="width: 75%;"></div>	1.5/2
Authority / Freshness	<div style="width: 75%;"></div>	1.0/2
Multilingual / Geo	<div style="width: 100%;"></div>	2.0/2

Source: <https://www.opdivo.com>



GEO STRENGTHS

- Broad oncology coverage (NSCLC, cHL, HCC 1L, melanoma...)
- OPDIVO Qvantig SC clearly positioned as the IV alternative
- Latest data surfaced on the HCP hub

GEO WEAKNESSES

- Patient site dominated by ISI at the expense of extractable narrative
- No detectable structured FAQ
- MOA barely present as direct text on the HCP side

THE CONSULTANT'S TAKE

Opdivo's content is markedly less extractable than direct competitor Keytruda. The patient site produces very little narrative beyond ISI — a critical GEO problem. The HCP site is news-first but lacks structured scientific depth in text.

BEST PRACTICE

Actionable recommendation. Add a standalone MOA text page, restructure the patient hub around indications, and create long-tail FAQs. ISI should be capped at 25-30% of each page.

Darzalex — Johnson & Johnson

Multiple myeloma (anti-CD38) · darzalex.com / darzalexhcp.com

GEO SCORE

5.5 /10

Narrative clarity	<div style="width: 50%;"><div style="background-color: #0070C0; height: 10px;"></div></div>	1.0/2
Q/A FAQ	<div style="width: 25%;"><div style="background-color: #0070C0; height: 10px;"></div></div>	0.5/2
HCP depth	<div style="width: 75%;"><div style="background-color: #0070C0; height: 10px;"></div></div>	1.5/2
Authority / Freshness	<div style="width: 50%;"><div style="background-color: #0070C0; height: 10px;"></div></div>	1.0/2
Multilingual / Geo	<div style="width: 75%;"><div style="background-color: #0070C0; height: 10px;"></div></div>	1.5/2

Source: <https://www.darzalex.com>



GEO STRENGTHS

- Both IV and SC (FASPRO) formulations documented — relevant for patient queries on administration time
- Patient support programs in place (Janssen withMe / Darzalex withMe)
- Combination data (Rd, Vd, KRd) referenced on the HCP side

GEO WEAKNESSES

- No clear line-of-therapy hub — queries like 'Darzalex first-line vs relapsed' are poorly served
- No substantive patient FAQ block
- MAIA, CASTOR, POLLUX, GRIFFIN trials under-leveraged in plain language

THE CONSULTANT'S TAKE

Darzalex shows a pattern typical of heme-onc products: strong technical HCP coverage but a patient hub under-resourced in extractable content. Myeloma patients ask very specific questions (lines of therapy, combinations, duration) that the site does not answer well in GEO format.

BEST PRACTICE

Actionable recommendation. Build 'Darzalex first-line / Darzalex in relapse' pages with dedicated FAQs, and publish Plain Language Summaries of the MAIA / GRIFFIN / CASTOR pivotal trials.

Tagrisso — AstraZeneca

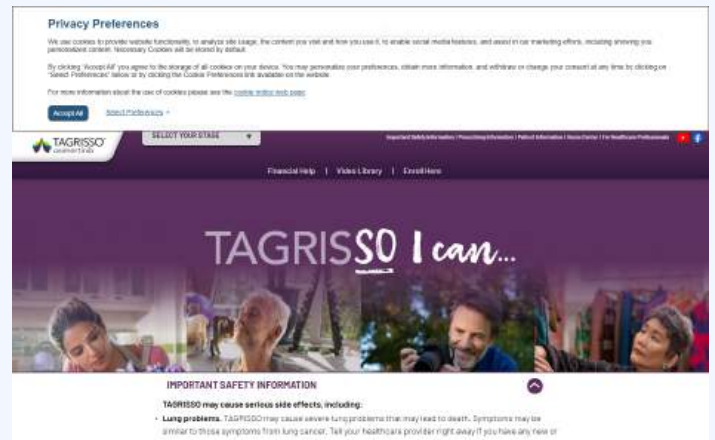
EGFR-mutated NSCLC (3rd-generation TKI) · tagrisso.com

GEO SCORE

5.0 /10

Narrative clarity	<div style="width: 20%;"><div style="width: 20%;"></div></div>	1.0/2
Q/A FAQ	<div style="width: 25%;"><div style="width: 25%;"></div></div>	0.5/2
HCP depth	<div style="width: 50%;"><div style="width: 50%;"></div></div>	1.0/2
Authority / Freshness	<div style="width: 50%;"><div style="width: 50%;"></div></div>	1.0/2
Multilingual / Geo	<div style="width: 75%;"><div style="width: 75%;"></div></div>	1.5/2

Source: <https://www.tagrisso.com>



GEO STRENGTHS

- FLAURA2 (1L combo with chemo) and ADAURA (adjuvant) approvals integrated
- Explicit linkage to EGFR testing — anchors the diagnostic journey
- AstraZeneca Open Innovation indirectly supports scientific citability

GEO WEAKNESSES

- Patient and HCP hubs not separated — confusing navigation for both audiences
- Thin FAQ (missing skin, ocular and ILD adverse events)
- AZ cookie banner / overlay generates noise for crawlers

THE CONSULTANT'S TAKE

Tagrisso is the archetypal oncology product with an excellent clinical story (FLAURA, ADAURA, FLAURA2) but a digital narrative that fails to capitalise on that scientific depth. LLMs queried on EGFR L858R cite UpToDate or Cancer.gov before tagrisso.com.

BEST PRACTICE

Actionable recommendation. Separate the patient and HCP hubs. Publish detailed PLS for FLAURA2 and ADAURA. Build a real FAQ on ILD / rash / ocular events.

Enhertu — AstraZeneca / Daiichi-Sankyo

HER2-low/HER2+ breast, gastric, NSCLC (ADC) · enhertu.com

GEO SCORE

5.0 /10

Narrative clarity	<div style="width: 50%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.0/2
Q/A FAQ	<div style="width: 25%;"><div style="background-color: #007bff; height: 10px;"></div></div>	0.5/2
HCP depth	<div style="width: 50%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.0/2
Authority / Freshness	<div style="width: 50%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.0/2
Multilingual / Geo	<div style="width: 75%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.5/2

Source: <https://www.enhertu.com>



GEO STRENGTHS

- HER2-low ADC concept explained visually with MOA
- DESTINY-Breast / DESTINY-Lung pages partly present
- Clear flag on interstitial lung disease as a class effect

GEO WEAKNESSES

- No dedicated HCP hub — scientific narrative is diluted across the patient side
- PI in PDF — no structured HTML version
- FAQ absent on hot-button topics: ILD, dose reduction, 2L/3L positioning

THE CONSULTANT'S TAKE

Enhertu is a clinical game-changer but the website does not match the franchise. Highly informed patients (persona 1.2) find the real data on ASCO or ESMO, not on enhertu.com.

BEST PRACTICE

Actionable recommendation. Dedicated HCP hub with DESTINY-Breast 04, 06, 09 data plus PLS. Patient FAQs on ILD / nausea / alopecia. ADC MOA diagram with detailed alt text.

Imbruvica — Johnson & Johnson / AbbVie

CLL, WM, chronic GVHD (BTK) · imbruvica.com

GEO SCORE

5.5 /10

Narrative clarity	<div style="width: 50%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.0/2
Q/A FAQ	<div style="width: 50%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.0/2
HCP depth	<div style="width: 50%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.0/2
Authority / Freshness	<div style="width: 50%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.0/2
Multilingual / Geo	<div style="width: 75%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.5/2

Source: <https://www.imbruvica.com>



GEO STRENGTHS

- Patient FAQ present on some topics (administration, food intake)
- CLL patient stories with day-to-day context
- RESONATE and iLLUMINATE data mentioned

GEO WEAKNESSES

- Competition with acalabrutinib (Calquence) and zanubrutinib (Brukinsa) not addressed
- Cardiac side effects (AF, hypertension) handled too briefly
- Jargon-heavy HCP HTML with little plain-language explanation

THE CONSULTANT'S TAKE

Imbruvica is the legacy BTK leader but is gradually losing the LLM war to Calquence and Brukinsa, whose sites are better structured around differentiated tolerability profiles. PM360's 'Listening Between the Lines' (Gold 2025) shows that the HCP narrative terrain has become critical.

BEST PRACTICE

Actionable recommendation. Comparative 'Imbruvica vs other BTKs' pages (compliance-safe), cardiovascular adverse-event FAQ, dedicated CLL TN vs R/R pages.

Lynparza — AstraZeneca / Merck

BRCA+ cancers (PARP) — ovarian, breast, prostate, pancreatic · lynparza.com / lynparzahcp.com

GEO SCORE

6.0 /10

Narrative clarity	<div style="width: 30%;"></div>	1.5/2
Q/A FAQ	<div style="width: 20%;"></div>	1.0/2
HCP depth	<div style="width: 30%;"></div>	1.5/2
Authority / Freshness	<div style="width: 20%;"></div>	1.0/2
Multilingual / Geo	<div style="width: 20%;"></div>	1.0/2

Source: <https://www.lynparza.com>



GEO STRENGTHS

- Separate, openly accessible patient and HCP hubs
- BRCA / HRD testing well explained — supports the diagnostic pathway
- SOLO, OlympiA, PROfound, POLO trials named and linked

GEO WEAKNESSES

- Multi-indication coverage without dedicated pages per cancer — informational clutter
- No dedicated 'BRCA patient journey' section
- Existing FAQ shallow on hematologic adverse events

THE CONSULTANT'S TAKE

Lynparza is an interesting case: a pivotal BRCA molecule well supported on the HCP side, but its mosaic of indications (ovarian, breast, prostate, pancreatic) dilutes SEO/GEO. Each indication deserves its own sub-hub.

BEST PRACTICE

Actionable recommendation. Create /ovary, /breast, /prostate, /pancreas sub-hubs with dedicated FAQs and PLS. BRCA patient videos with transcripts.

Verzenio — Eli Lilly

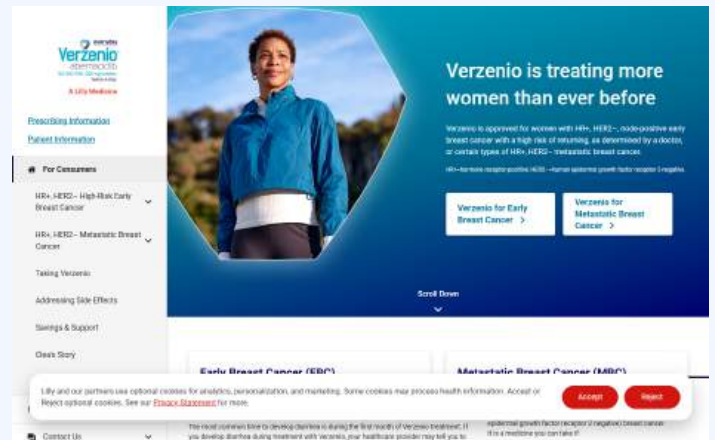
HR+/HER2- breast cancer (CDK4/6) — EBC and MBC · verzenio.com

GEO SCORE

5.0 /10

Narrative clarity	<div style="width: 20%;"></div>	1.0/2
Q/A FAQ	<div style="width: 25%;"></div>	0.5/2
HCP depth	<div style="width: 50%;"></div>	1.0/2
Authority / Freshness	<div style="width: 50%;"></div>	1.0/2
Multilingual / Geo	<div style="width: 75%;"></div>	1.5/2

Source: <https://www.verzenio.com>



GEO STRENGTHS

- 'Being Here' campaign (Cannes Lions 2024) — strong patient storytelling
- MONARCH and monarchE trials referenced
- Unified patient site covering both EBC and MBC

GEO WEAKNESSES

- No separation between early and metastatic indications — LLM confusion
- No FAQ on diarrhea (the headline CDK4/6 adverse event)
- HCP pages thin compared to Ibrance and Kisqali

THE CONSULTANT'S TAKE

Verzenio benefits from a remarkable creative campaign but the website suffers from EBC/MBC unification. LLMs queried on 'Verzenio adjuvant high-risk EBC' often return monarchE on PubMed rather than the Lilly site.

BEST PRACTICE

Actionable recommendation. Separate EBC (adjuvant) and MBC hubs. Structured diarrhea FAQ (proactive management). Open comparison with Kisqali (NATALEE) within fair balance.

Voranigo — Servier

IDH-mutated grade 2 glioma (low-grade) · voranigo.com

GEO SCORE

Screenshot unavailable
(heavy JS / bot protection)

4.5 /10

Narrative clarity	<div style="width: 50%;"><div style="width: 100%;"></div></div>	1.0/2
Q/A FAQ	<div style="width: 25%;"><div style="width: 100%;"></div></div>	0.5/2
HCP depth	<div style="width: 50%;"><div style="width: 100%;"></div></div>	1.0/2
Authority / Freshness	<div style="width: 25%;"><div style="width: 100%;"></div></div>	0.5/2
Multilingual / Geo	<div style="width: 75%;"><div style="width: 100%;"></div></div>	1.5/2

GEO STRENGTHS

- Recently launched (FDA August 2024) — opportunity to build the narrative from day one
- Very narrow indication (IDH-mutated grade 2 glioma) — little competitive noise
- INDIGO pivotal trial cited

GEO WEAKNESSES

- Minimal patient site — little content
- No patient stories yet (recent launch)
- HCP depth still limited

THE CONSULTANT'S TAKE

Voranigo is the archetypal neuro-oncology launch. Servier has a 12-24 month GEO window to become THE cited source for 'IDH1/IDH2 mutation low-grade glioma treatment'. The narrative built now will determine the brand's LLM position for the next five years.

BEST PRACTICE

Actionable recommendation. Invest heavily in HCP / KOL / patient-story content from day one. Wikipedia stewardship is critical. Launch an IDH-glioma disease-awareness site.

Carvykti — Johnson & Johnson / Legend

R/R multiple myeloma (CAR-T BCMA) · carvykti.com

GEO SCORE

5.5 /10

Narrative clarity	<div style="width: 50%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.0/2
Q/A FAQ	<div style="width: 25%;"><div style="background-color: #007bff; height: 10px;"></div></div>	0.5/2
HCP depth	<div style="width: 50%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.0/2
Authority / Freshness	<div style="width: 50%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.0/2
Multilingual / Geo	<div style="width: 100%;"><div style="background-color: #007bff; height: 10px;"></div></div>	2.0/2

Source: <https://www.carvykti.com>



GEO STRENGTHS

- First consumer-facing CAR-T campaign (BioPharma Dive)
- Network of certified CAR-T centers documented
- Cell-therapy process explained visually

GEO WEAKNESSES

- CRS (cytokine release syndrome) barely demystified
- No deep FAQ on eligibility / leukapheresis
- CARTITUDE-4 (1L-2L) data under-leveraged on the patient side

THE CONSULTANT'S TAKE

Carvykti crosses a line: a CAR-T speaking directly to patients via TV. It is revolutionary and unsettling from a compliance standpoint. LLM narrative is being shaped in parallel with the TV spot — a unique window, but the digital hub is not yet keeping pace.

BEST PRACTICE

Actionable recommendation. Patient CAR-T journey hub (eligibility leukapheresis infusion follow-up). CRS / neurotoxicity FAQ. Reference-center locator pages.

3.2 — IMMUNO-DERMATO-RHEUMATOLOGY

3.2 — Immuno-dermato-rheumatology

This section covers 9 major brands in immuno-dermato-rheumatology. Average score: 5.8/10.

Dupixent — Sanofi / Regeneron

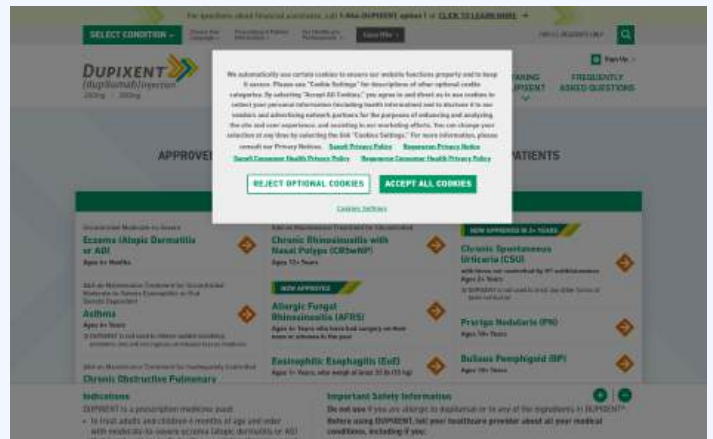
9 indications — AD, asthma, EoE, COPD, CRSwNP, prurigo, urticaria · dupixent.com / dupixenthcp.com

GEO SCORE

8.0 /10

Narrative clarity	<div style="width: 100%; height: 10px; background-color: #007bff;"></div>	2.0/2
Q/A FAQ	<div style="width: 75%; height: 10px; background-color: #007bff;"></div>	1.5/2
HCP depth	<div style="width: 100%; height: 10px; background-color: #007bff;"></div>	2.0/2
Authority / Freshness	<div style="width: 75%; height: 10px; background-color: #007bff;"></div>	1.0/2
Multilingual / Geo	<div style="width: 75%; height: 10px; background-color: #007bff;"></div>	1.5/2

Source: <https://www.dupixent.com>



GEO STRENGTHS

- Exemplary indication-by-indication architecture — each indication has its own information tree
- Separate patient and HCP hubs, both accessible without a login
- MyWay support program documented; real patient stories with partial transcripts
- Eczema Skin Gallery (Cannes Lions / PM360 Gold) — category benchmark for DEI

GEO WEAKNESSES

- FAQ insufficiently developed on conjunctivitis, alopecia, pregnancy
- FAQPage schema.org missing on several pages
- French version (dupixent.fr) thinner and JS-heavy

THE CONSULTANT'S TAKE

Dupixent is the most accomplished digital franchise in immunology. Architecture, patient/HCP separation, storytelling, multi-indication coverage: Dupixent sets the standard. It is the brand most cited by LLMs on severe adult atopic dermatitis. The remaining quick win: complete FAQ coverage and rebuild dupixent.fr in SSR.

BEST PRACTICE

Actionable recommendation. Per-indication FAQ block with FAQPage schema. Rebuild dupixent.fr as server-side rendered with HAS / Ameli alignment.

Skyrizi — AbbVie

Psoriasis, PsA, Crohn's, UC (anti-IL-23) · skyrizi.com / skyrizihcp.com

GEO SCORE

6.0 /10

Narrative clarity	<div style="width: 75%;"></div>	1.5/2
Q/A FAQ	<div style="width: 50%;"></div>	1.0/2
HCP depth	<div style="width: 50%;"></div>	1.0/2
Authority / Freshness	<div style="width: 50%;"></div>	1.0/2
Multilingual / Geo	<div style="width: 75%;"></div>	1.5/2

Source: <https://www.skyrizi.com>



GEO STRENGTHS

- 'Nothing Is Everything' campaign — sonic branding and quotable tagline
- Four indications covered with per-indication navigation
- Dosing schedule (4 doses/year after induction) clearly highlighted

GEO WEAKNESSES

- Patient FAQ exists but is short
- No dedicated Plain Language Summaries (MOTIVATE, ADVANCE)
- HCP pages shallower than Tremfya's

THE CONSULTANT'S TAKE

Skyrizi is climbing fast on revenue (four administrations a year is a powerful argument) but its LLM-extractable content lags leader Dupixent. The 'nothing is everything' narrative is quotable but does not build scientific authority.

BEST PRACTICE

Actionable recommendation. PLS of the INSPIRE / COMMAND trials. Deeper FAQ on IV Crohn's induction. Per-indication HCP hub.

Rinvoq — AbbVie

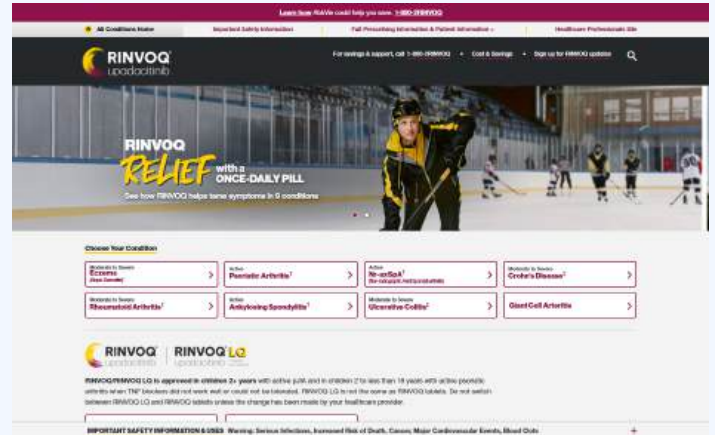
9 immunology indications (JAK1) — AD, RA, AxSpA, PsA, UC, Crohn's, JIA... · rinvoq.com / rinvoqhcp.com

GEO SCORE

6.5 /10

Narrative clarity	<div style="width: 100%; height: 10px; background-color: #007bff;"></div>	1.5/2
Q/A FAQ	<div style="width: 75%; height: 10px; background-color: #007bff;"></div>	1.0/2
HCP depth	<div style="width: 75%; height: 10px; background-color: #007bff;"></div>	1.5/2
Authority / Freshness	<div style="width: 75%; height: 10px; background-color: #007bff;"></div>	1.0/2
Multilingual / Geo	<div style="width: 75%; height: 10px; background-color: #007bff;"></div>	1.5/2

Source: <https://www.rinvoq.com>



GEO STRENGTHS

- Per-indication navigation in place
- JAK boxed warning addressed explicitly (risk management)
- 'Take on Anything' tagline with visible patient stories

GEO WEAKNESSES

- JAK boxed warning (cardio, cancer, thrombosis) reads as alarming — not sufficiently framed in patient-friendly explanation
- No comparison with other JAKs (Olumiant, Xeljanz)
- Hematologic side effects poorly demystified

THE CONSULTANT'S TAKE

Rinvoq carries a courageous narrative: yes, the JAK has a boxed warning, and the brand discusses it openly. Paradoxically a GEO asset — LLMs reward sources that address risks rigorously. The pedagogy of risk could still be improved.

BEST PRACTICE

Actionable recommendation. Dedicated 'Understanding the JAK boxed warning' page with FAQ. Compliance-safe comparisons with other JAKs. JAK1 selectivity diagram explained.

Tremfya — Johnson & Johnson

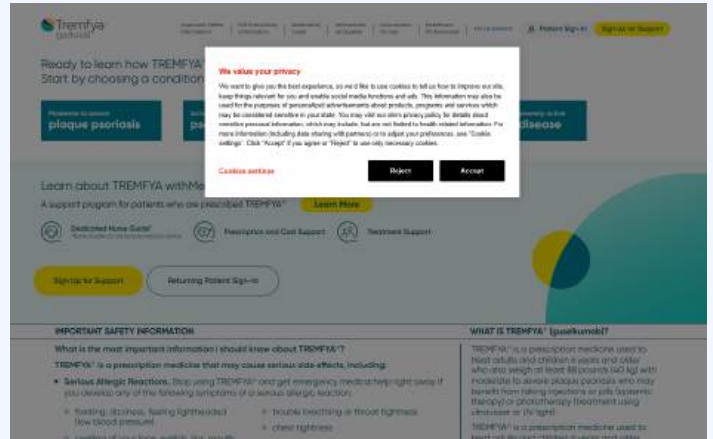
PsO, PsA, UC, Crohn's (anti-IL-23p19) · tremfya.com / tremfyawithme.com

GEO SCORE

5.0 /10

Narrative clarity	<div style="width: 20%; background-color: #0070C0; height: 10px;"></div>	1.0/2
Q/A FAQ	<div style="width: 25%; background-color: #0070C0; height: 10px;"></div>	0.5/2
HCP depth	<div style="width: 50%; background-color: #0070C0; height: 10px;"></div>	1.0/2
Authority / Freshness	<div style="width: 50%; background-color: #0070C0; height: 10px;"></div>	1.0/2
Multilingual / Geo	<div style="width: 75%; background-color: #0070C0; height: 10px;"></div>	1.5/2

Source: <https://www.tremfya.com>



GEO STRENGTHS

- tremfyawithme.com — distinct patient support site, smart strategy
- First IL-23 indicated in IBD (UC, Crohn's) — key differentiator
- 'Emerge' patient stories with diverse skin tones (DEI)

GEO WEAKNESSES

- No proprietary HCP hub — delegated to Janssen Medical Cloud behind a login
- Short patient FAQ
- VOYAGE / DISCOVER / QUASAR data under-leveraged in plain language

THE CONSULTANT'S TAKE

Tremfya is gaining ground (PsA / IBD) but its digital hub is under-resourced relative to Skyrizi and Stelara. The walled-garden Janssen Medical Cloud HCP route is a major GEO drag.

BEST PRACTICE

Actionable recommendation. Public first-level HCP hub. PLS for QUASAR (UC) and GALAXI (Crohn's). Dedicated IBD FAQ.

Cosentyx — Novartis

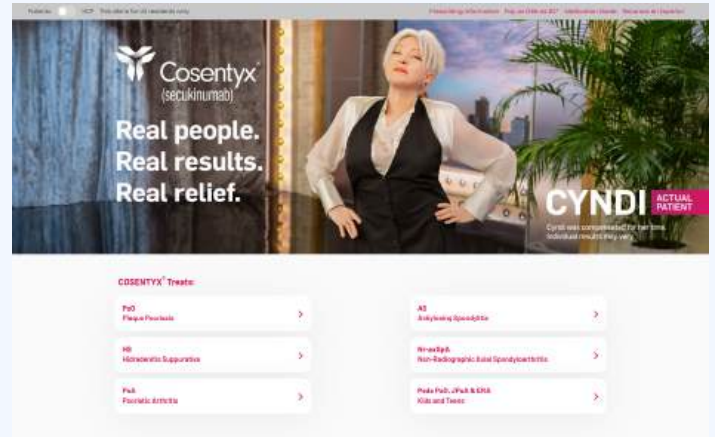
7 indications — PsO, PsA, AS, AxSpA, HS, ERA, uveitis · cosentyx.com

GEO SCORE

5.5 /10

Narrative clarity	<div style="width: 50%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.0/2
Q/A FAQ	<div style="width: 50%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.0/2
HCP depth	<div style="width: 50%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.0/2
Authority / Freshness	<div style="width: 50%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.0/2
Multilingual / Geo	<div style="width: 50%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.5/2

Source: <https://www.cosentyx.com>



GEO STRENGTHS

- Hidradenitis suppurativa covered — distinctive therapeutic niche
- First IL-17A approved in children (pediatric PsO)
- Marketing Team Gold PM360 2024 — creative team recognised

GEO WEAKNESSES

- Integrated patient/HCP hub (no clear separation)
- SUNRISE, MAXIMISE, MEASURE 5 data not popularised
- Bimzelx (IL-17A/F) competitive threat not pre-empted narratively

THE CONSULTANT'S TAKE

Cosentyx is mature but entering defensive mode against Bimzelx (IL-17A/F, superior PASI100) and the IL-23s. The site has not yet updated its storytelling for that new competitive reality.

BEST PRACTICE

Actionable recommendation. Dedicated HS page with FAQ — rare use case means low competitive GEO noise. IL-17A vs IL-17A/F differentiation in scientific Q&A.;

Sotyktu — Bristol Myers Squibb

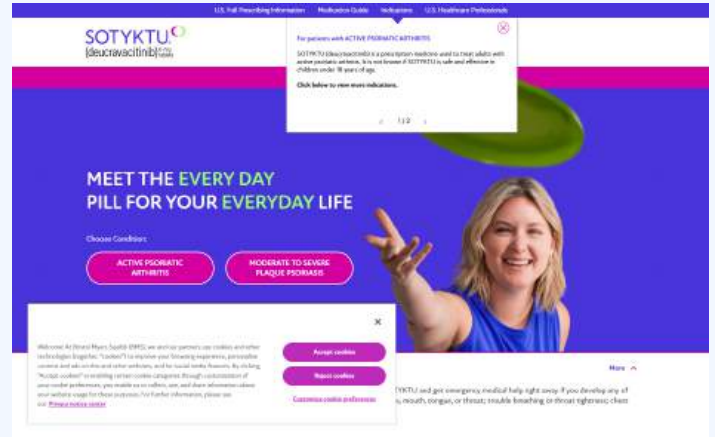
Plaque psoriasis (TYK2) · sotyktu.com / sotyktuhcp.com

GEO SCORE

4.5 /10

Narrative clarity	<div style="width: 20%;"></div>	1.0/2
Q/A FAQ	<div style="width: 25%;"></div>	0.5/2
HCP depth	<div style="width: 50%;"></div>	1.0/2
Authority / Freshness	<div style="width: 25%;"></div>	0.5/2
Multilingual / Geo	<div style="width: 75%;"></div>	1.5/2

Source: <https://www.sotyktu.com>



GEO STRENGTHS

- First oral TYK2 approved — innovative concept to explain
- Separate HCP hub
- Open comparison vs Otezla (POETYK PSO-1 / PSO-2)

GEO WEAKNESSES

- TYK2 vs JAK distinction poorly explained — patient confusion
- Very limited FAQ
- No mature Wikipedia authority yet

THE CONSULTANT'S TAKE

Sotyktu is a promising BMS launch but the GEO window is closing fast: competitors (Skyrizi, Tremfya, Bimzelx) have already built their LLM authority. Sotyktu must educate the market on TYK2 versus JAK to even appear in AI answers.

BEST PRACTICE

Actionable recommendation. 'TYK2 vs JAK: why it's different' page with diagram. Wikipedia stewardship for deucravacitinib. POETYK PLS.

Humira — AbbVie

11 anti-TNF indications — legacy (post-LOE biosimilars) · humira.com

GEO SCORE

Screenshot unavailable
(heavy JS / bot protection)

6.0 /10

Narrative clarity	<div style="width: 75%;"><div style="width: 75%;"></div></div>	1.5/2
Q/A FAQ	<div style="width: 50%;"><div style="width: 50%;"></div></div>	1.0/2
HCP depth	<div style="width: 75%;"><div style="width: 75%;"></div></div>	1.5/2
Authority / Freshness	<div style="width: 50%;"><div style="width: 50%;"></div></div>	1.0/2
Multilingual / Geo	<div style="width: 50%;"><div style="width: 50%;"></div></div>	1.0/2

GEO STRENGTHS

- Massive legacy site with 20+ years of accumulated content
- Adalimumab Wikipedia entry is extremely thorough (strong LLM signal)
- Structured patient FAQ in place

GEO WEAKNESSES

- Post-LOE: AbbVie has reduced site investment (resources have shifted to Skyrizi / Rinvoq)
- Biosimilars (Hyrimoz, Cyltezo, Yusimry...) cited on competitor sides — Humira no longer differentiates
- Dated content on several indication pages

THE CONSULTANT'S TAKE

Humira remains the legacy standard but its GEO destiny is to become a 'dictionary brand' — cited to explain the anti-TNF class rather than to drive prescription. AbbVie has shifted its narrative to Skyrizi / Rinvoq, which is strategically coherent.

BEST PRACTICE

Actionable recommendation. Maintain an educational anti-TNF page (class reference). Wikipedia stewardship. No additional patient investment — let the existing content do the work.

Stelara — Johnson & Johnson

PsO, PsA, Crohn's, UC (anti-IL-12/23) — post-LOE biosimilars · stelara.info.com

GEO SCORE

Screenshot unavailable
(heavy JS / bot protection)

4.5 /10

Narrative clarity	<div style="width: 50%;"><div style="width: 100%;"></div></div>	1.0/2
Q/A FAQ	<div style="width: 25%;"><div style="width: 100%;"></div></div>	0.5/2
HCP depth	<div style="width: 50%;"><div style="width: 100%;"></div></div>	1.0/2
Authority / Freshness	<div style="width: 25%;"><div style="width: 100%;"></div></div>	0.5/2
Multilingual / Geo	<div style="width: 75%;"><div style="width: 100%;"></div></div>	1.5/2

GEO STRENGTHS

- Substantial IBD data (UNITI, IM-UNITI, UNIFI)
- Present in international guidelines — indirectly cited by LLMs

GEO WEAKNESSES

- Post-LOE (Pyzchiva, Selarsdi, Wezlana biosimilars arrived 2024-2025) — declining brand narrative
- Rarely updated site
- No structured FAQ

THE CONSULTANT'S TAKE

Stelara is entering its post-LOE phase. J&J; has shifted focus to Tremfya. The Stelara site becomes a transition asset — useful for current patients, but not a future investment.

BEST PRACTICE

Actionable recommendation. Minimum maintenance. Explicit links to Tremfya for switch journeys. Keep PI current for safety-related post-LOE queries.

Bimzelx — UCB

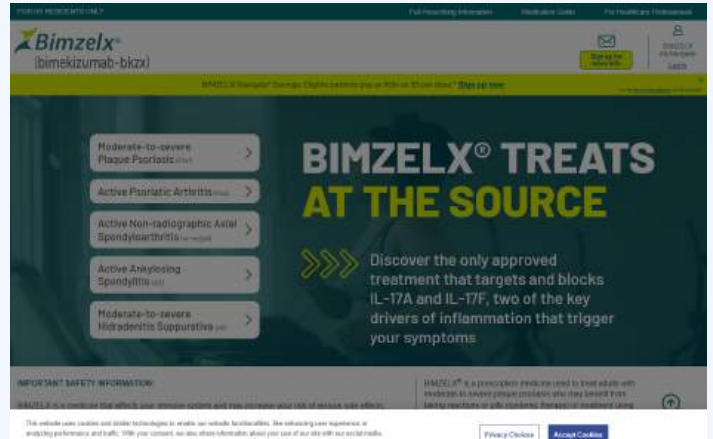
PsO, PsA, AxSpA, HS (anti-IL-17A/F) · bimzelx.com

GEO SCORE

6.5 /10

Narrative clarity	<div style="width: 50%;"><div style="width: 50%;"></div></div>	1.5/2
Q/A FAQ	<div style="width: 50%;"><div style="width: 50%;"></div></div>	1.0/2
HCP depth	<div style="width: 75%;"><div style="width: 75%;"></div></div>	1.5/2
Authority / Freshness	<div style="width: 50%;"><div style="width: 50%;"></div></div>	1.0/2
Multilingual / Geo	<div style="width: 75%;"><div style="width: 75%;"></div></div>	1.5/2

Source: <https://www.bimzelx.com>



GEO STRENGTHS

- 'Get Yourself Back' award-winning campaign — strong storytelling
- PASI100 superiority vs Cosentyx / Skyrizi in BE RADIANT, BE SURE — documented claim
- UCB Compass support program documented

GEO WEAKNESSES

- Oral candidiasis (IL-17F class effect) needs better context
- Recent launch — Wikipedia entry for bimekizumab still thin
- Limited patient FAQ

THE CONSULTANT'S TAKE

Bimzelx is the challenger that could re-rank the IL-17 / IL-23 GEO leaderboard. LLMs are starting to cite it for 'best treatment for severe psoriasis' on the back of PASI100 superiority. A 12-18 month window to lock the position in.

BEST PRACTICE

Actionable recommendation. Detailed PLS of the head-to-head studies. Oral candidiasis FAQ (management / fluconazole). Active Wikipedia stewardship.

3.3 — CARDIO-METABOLIC & OBESITY

3.3 — Cardio-metabolic & obesity

This section covers 7 major brands in cardio-metabolic & obesity. Average score: 6.6/10.

Ozempic / Wegovy — Novo Nordisk

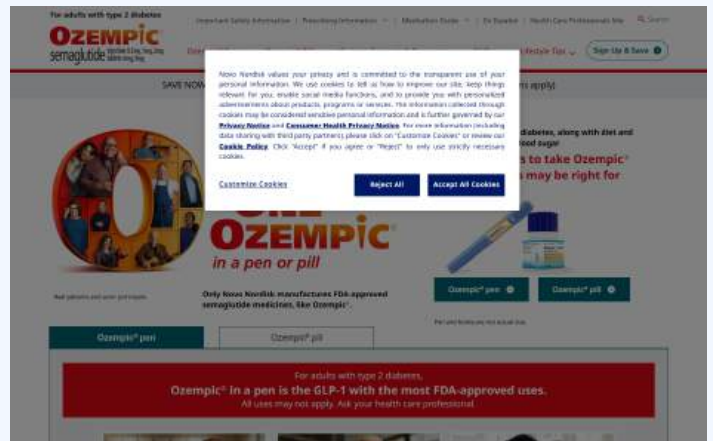
T2D (Ozempic) / Obesity (Wegovy) / oral (Rybelsus) · ozempic.com / wegovy.com

GEO SCORE

7.0 /10

Narrative clarity	<div style="width: 30%;"></div>	1.5/2
Q/A FAQ	<div style="width: 20%;"></div>	1.0/2
HCP depth	<div style="width: 30%;"></div>	1.5/2
Authority / Freshness	<div style="width: 20%;"></div>	1.0/2
Multilingual / Geo	<div style="width: 40%;"></div>	2.0/2

Source: <https://www.ozempic.com>



GEO STRENGTHS

- Most widely known pharma brand of 2024-2026 — massive Wikipedia authority
- 'Oh oh oh Ozempic' jingle — iconic and quotable
- Wegovy 'Power of' and 'This is Me' multi-award-winning (PM360 Brand of the Year 2024)
- Separate diabetes and obesity sites

GEO WEAKNESSES

- Massive organic TikTok 'Ozempic face' vs zero official content: LLM narrative dictated by patients themselves
- wegovy.com is JS-heavy (incomplete rendering for crawlers)
- Communication on duration, discontinuation, restart insufficient

THE CONSULTANT'S TAKE

Ozempic / Wegovy is paradoxically the pharma brand 'most talked about' inside LLMs, but with the least Novo-controlled narrative. Patients generate the content — for better and for worse. Building official GEO authority is urgent.

BEST PRACTICE

Actionable recommendation. SSR rebuild of wegovy.com. Dedicated 'duration of treatment / discontinuation' site with a rigorous FAQ. Wikipedia stewardship for semaglutide.

Mounjaro / Zepbound — Eli Lilly

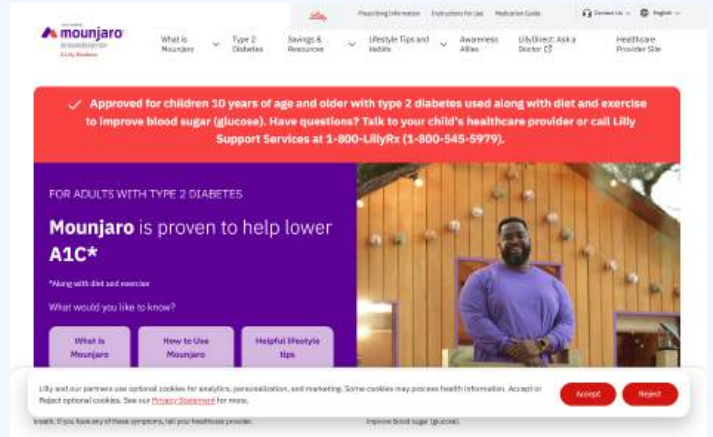
T2D (Mounjaro) / Obesity (Zepbound) / OSA (Zepbound) · mounjaro.com / zepbound.lilly.com

GEO SCORE

6.5 /10

Narrative clarity	<div style="width: 50%;"><div style="width: 50%;"></div></div>	1.5/2
Q/A FAQ	<div style="width: 50%;"><div style="width: 50%;"></div></div>	1.0/2
HCP depth	<div style="width: 50%;"><div style="width: 50%;"></div></div>	1.0/2
Authority / Freshness	<div style="width: 50%;"><div style="width: 50%;"></div></div>	1.0/2
Multilingual / Geo	<div style="width: 100%;"><div style="width: 100%;"></div></div>	2.0/2

Source: <https://www.mounjaro.com>



GEO STRENGTHS

- Scientific advantage as a GIP/GLP-1 dual agonist — a differentiating GEO concept
- Mounjaro 'Healthy Skepticism' campaign recognised (Cannes Lions)
- Zepbound OSA — new indication opened in 2024
- SURMOUNT / SURPASS studies referenced

GEO WEAKNESSES

- No indication-specific hub for OSA
- Zepbound site less rich than wegovy.com in patient stories
- Comparative semaglutide vs tirzepatide data not surfaced on lilly.com

THE CONSULTANT'S TAKE

Lilly has a scientific edge (GIP/GLP-1) but is losing the LLM war on brand recognition against semaglutide. The 2025-2027 window is critical to position tirzepatide as the new GLP-1+ benchmark in GEO.

BEST PRACTICE

Actionable recommendation. Dedicated OSA hub. PLS for SURMOUNT-1, 2, 3, 4. 'GIP: why it matters' page with diagram. Wikipedia stewardship for tirzepatide.

Jardiance — Boehringer Ingelheim / Lilly

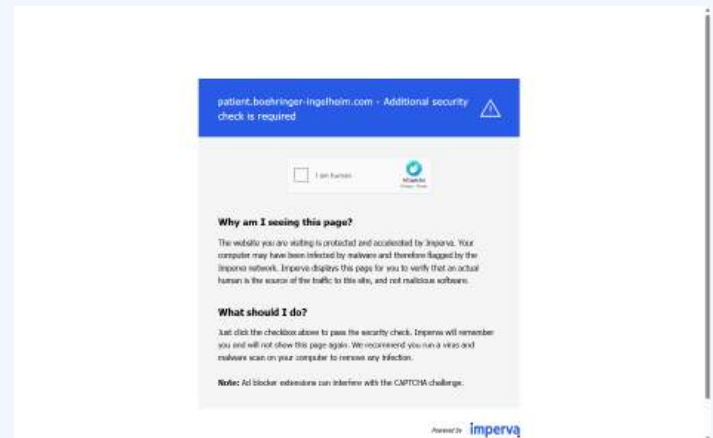
T2D, HF (HFREF/HFpEF), CKD (SGLT2) · jardiance.com

GEO SCORE

6.5 /10

Narrative clarity	<div style="width: 100%;"><div style="width: 100%;"></div></div>	1.5/2
Q/A FAQ	<div style="width: 100%;"><div style="width: 50%;"></div></div>	1.0/2
HCP depth	<div style="width: 100%;"><div style="width: 100%;"></div></div>	1.5/2
Authority / Freshness	<div style="width: 100%;"><div style="width: 50%;"></div></div>	1.0/2
Multilingual / Geo	<div style="width: 100%;"><div style="width: 100%;"></div></div>	1.5/2

Source: <https://www.jardiance.com>



GEO STRENGTHS

- EMPEROR-Reduced / EMPEROR-Preserved / EMPA-KIDNEY — major outcome trials
- 'Tasting What's Next' storytelling shared with Eliquis (BMS-Pfizer culture)
- HFpEF indication — first SGLT2 approved

GEO WEAKNESSES

- Imperva hCaptcha blocks AI crawlers — confirmed partial invisibility
- No structured patient FAQ
- HCP hub fragmented across BI and Lilly

THE CONSULTANT'S TAKE

Jardiance suffers from a major GEO anti-pattern: aggressive bot protection. The hCaptcha on jardiance.com mechanically blocks GPTBot, ClaudeBot, PerplexityBot. The quality of internal content is neutralised by the gate.

BEST PRACTICE

Actionable recommendation. Critical action #1: remove hCaptcha for identified bot user-agents (whitelist AI crawlers). Patient FAQ. EMPEROR PLS.

Farxiga / Forxiga — AstraZeneca

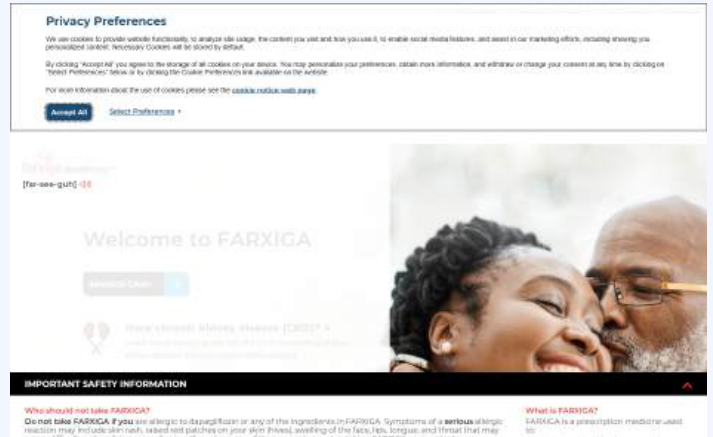
T2D, HF, CKD (SGLT2) · farxiga.com

GEO SCORE

5.5 /10

Narrative clarity	<div style="width: 50%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.0/2
Q/A FAQ	<div style="width: 25%;"><div style="background-color: #007bff; height: 10px;"></div></div>	0.5/2
HCP depth	<div style="width: 75%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.5/2
Authority / Freshness	<div style="width: 50%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.0/2
Multilingual / Geo	<div style="width: 75%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.5/2

Source: <https://www.farxiga.com>



GEO STRENGTHS

- DAPA-HF, DELIVER, DAPA-CKD studies named
- HF with preserved EF (DELIVER) — differentiator
- Consistent multi-country presence

GEO WEAKNESSES

- AZ cookie banner ubiquitous in crawler renderings
- Minimalist FAQ
- No comparison with Jardiance — narrative competitive gap

THE CONSULTANT'S TAKE

Farxiga vs Jardiance is one of the tightest GEO battles in SGLT2. Patients constantly ask LLMs 'Farxiga or Jardiance?'. Neither brand owns the narrative.

BEST PRACTICE

Actionable recommendation. Compliance-safe 'How to choose an SGLT2' page with patient criteria. Detailed FAQ. PLS for DELIVER (HFpEF).

Entresto — Novartis

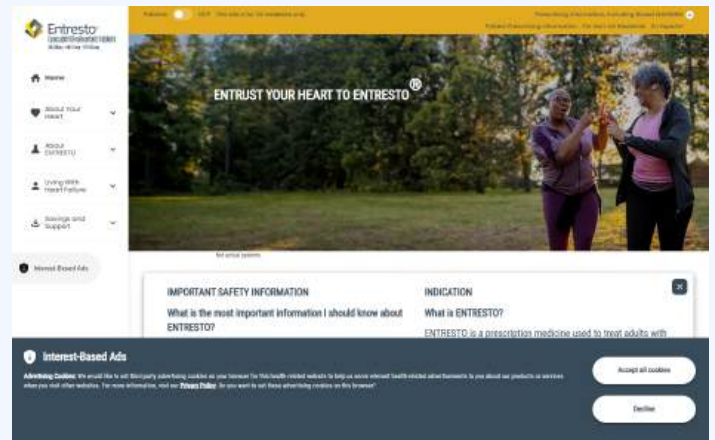
Heart failure (ARNI) · entresto.com

GEO SCORE

6.5 /10

Narrative clarity	<div style="width: 100%;"><div style="width: 100%;"></div></div>	1.5/2
Q/A FAQ	<div style="width: 100%;"><div style="width: 50%;"></div></div>	1.0/2
HCP depth	<div style="width: 100%;"><div style="width: 100%;"></div></div>	1.5/2
Authority / Freshness	<div style="width: 100%;"><div style="width: 50%;"></div></div>	1.0/2
Multilingual / Geo	<div style="width: 100%;"><div style="width: 100%;"></div></div>	1.5/2

Source: <https://www.entresto.com>



GEO STRENGTHS

- PARADIGM-HF and PARAGON-HF referenced — major outcome trials
- ARNI concept well explained (differentiation from ACE-I / ARB)
- HF patient stories visible

GEO WEAKNESSES

- ACE-I ARNI switch poorly explained (friction point for prescribers)
- Mediocre FAQ
- Mortality reduction (-20% vs enalapril) under-leveraged for patients

THE CONSULTANT'S TAKE

Entresto is solid but maturing — ESC/AHA guidelines now standardise it in HFREF. LLM narrative is shifting toward 'when to switch' and 'at what stage'.

BEST PRACTICE

Actionable recommendation. 'When to switch to Entresto?' patient-journey page. Hypotension / hyperkalemia FAQ. Comparisons with SGLT2 + ARNI (modern HF quadruple therapy).

Eliquis — Bristol Myers Squibb / Pfizer

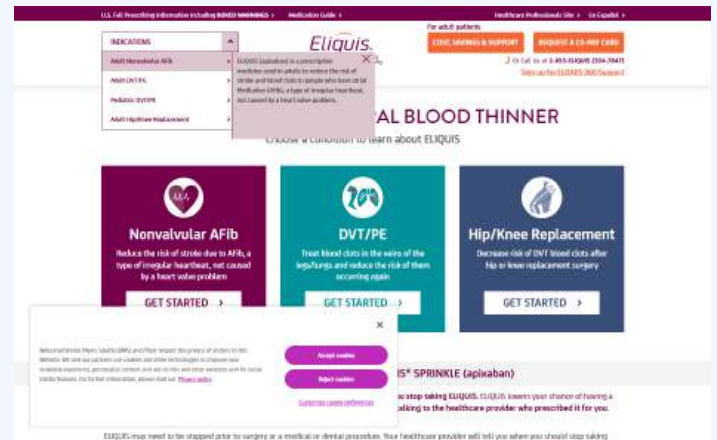
Non-valvular AF, DVT/PE, post-surgical prophylaxis (DOAC) · eliquis.com

GEO SCORE

7.0 /10

Narrative clarity	<div style="width: 75%;"></div>	1.5/2
Q/A FAQ	<div style="width: 75%;"></div>	1.5/2
HCP depth	<div style="width: 75%;"></div>	1.5/2
Authority / Freshness	<div style="width: 50%;"></div>	1.0/2
Multilingual / Geo	<div style="width: 75%;"></div>	1.5/2

Source: <https://www.eliquis.com>



GEO STRENGTHS

- Extensive FAQ (interactions, missed dose, surgery)
- 'Tasting What's Next' campaign (Cannes Lions Health)
- Strong warfarin DOAC comparison narrative

GEO WEAKNESSES

- Pradaxa, Xarelto, Lixiana competitors not directly addressed
- Few patient stories
- HCP hub thinner than European competitors' (Pradaxa)

THE CONSULTANT'S TAKE

Eliquis is one of the best pharma cardio sites on FAQ depth. LLMs frequently cite eliquis.com for 'missed dose', 'pre-surgery stop', and 'interactions'. A genuine case study.

BEST PRACTICE

Actionable recommendation. Maintain the FAQ lead. Patient stories for DVT/PE. HCP hub strengthened around sub-populations (renal impairment, elderly).

Leqvio — Novartis

Hypercholesterolemia (siRNA PCSK9) — 2 injections/year · leqvio.com

GEO SCORE

7.0 /10

Narrative clarity	<div style="width: 75%;"></div>	1.5/2
Q/A FAQ	<div style="width: 50%;"></div>	1.0/2
HCP depth	<div style="width: 75%;"></div>	1.5/2
Authority / Freshness	<div style="width: 50%;"></div>	1.0/2
Multilingual / Geo	<div style="width: 100%;"></div>	2.0/2

Source: <https://www.leqvio.com>



GEO STRENGTHS

- Major practical benefit: two injections a year (vs monthly Repatha/Praluent) — a quotable pivot point
- siRNA — novel mechanism explained
- ORION-9/10/11 referenced

GEO WEAKNESSES

- siRNA concept poorly demystified for patients
- No comparative pages with PCSK9 mAbs
- Cardiovascular outcomes trial (ORION-4) still ongoing

THE CONSULTANT'S TAKE

Leqvio holds a structural GEO advantage: 'two injections a year' is memorable and quotable by LLMs. A strong base to amplify.

BEST PRACTICE

Actionable recommendation. 'siRNA vs antibody: understanding the difference' page. Twice-yearly administration FAQ. PLS compilations of ORION trials.

3.4 — NEUROLOGY & RARE DISEASES

3.4 — Neurology & rare diseases

This section covers 7 major brands in neurology & rare diseases. Average score: 6.9/10.

Leqembi — Eisai / Biogen

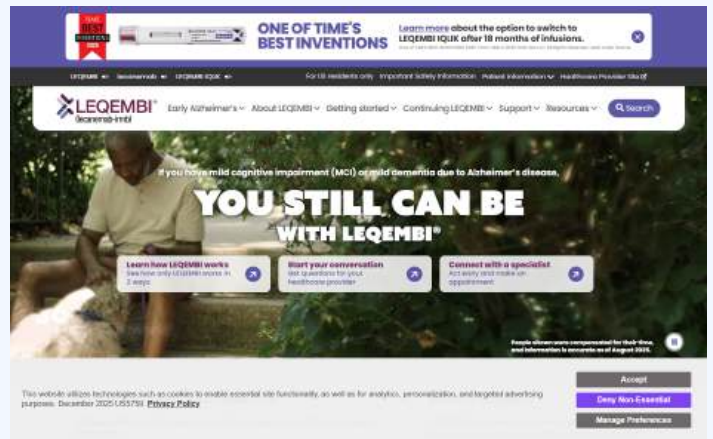
Early Alzheimer's disease (anti-A) · leqembi.com

GEO SCORE

6.0 /10

Narrative clarity	<div style="width: 30%;"></div>	1.5/2
Q/A FAQ	<div style="width: 50%;"></div>	1.0/2
HCP depth	<div style="width: 50%;"></div>	1.0/2
Authority / Freshness	<div style="width: 50%;"></div>	1.0/2
Multilingual / Geo	<div style="width: 75%;"></div>	1.5/2

Source: <https://www.leqembi.com>



GEO STRENGTHS

- Structured eligibility and diagnostic-journey pages
- ARIA (Amyloid-Related Imaging Abnormalities) explained
- 'You Still Can Be' campaign with early Alzheimer's patient stories

GEO WEAKNESSES

- MMSE / CDR-SB scales poorly demystified for patients
- APOE- 4 genotyping treated briefly (critical for ARIA risk)
- No anticipation of Kisunla (donanemab) comparison

THE CONSULTANT'S TAKE

Leqembi opens a new therapeutic era. LLM narrative is being built right now, and Leqembi must become THE reference for 'early Alzheimer's treatment' before Kisunla. The site is off to a good start.

BEST PRACTICE

Actionable recommendation. Patient-friendly 'Are you eligible? APOE and amyloid testing' page. ARIA FAQ. CLARITY-AD PLS.

Ocrevus — Roche / Genentech

Relapsing MS, active secondary MS, primary progressive MS (anti-CD20) · ocrevus.com

GEO SCORE

7.0 /10

Narrative clarity	<div style="width: 75%;"></div>	1.5/2
Q/A FAQ	<div style="width: 50%;"></div>	1.0/2
HCP depth	<div style="width: 75%;"></div>	1.5/2
Authority / Freshness	<div style="width: 75%;"></div>	1.5/2
Multilingual / Geo	<div style="width: 75%;"></div>	1.5/2

Source: <https://www.ocrevus.com>



GEO STRENGTHS

- First and only treatment for primary progressive MS — unique differentiator
- Ocrevus Zunovo (SC) — administration option
- Many MS patient stories with partial transcripts
- ORATORIO, OPERA I/II data referenced

GEO WEAKNESSES

- PML risk poorly demystified (anti-CD20 class effect)
- No comparison with Kesimpta, Briumvi (other anti-CD20s)
- Patient FAQ still short

THE CONSULTANT'S TAKE

Ocrevus is among the best neuro sites thanks to its PPMS storytelling and clean architecture. Anti-CD20 competition is rising (monthly SC Kesimpta, short-course IV Briumvi) — Ocrevus must reinforce its GEO differentiation.

BEST PRACTICE

Actionable recommendation. Comparative anti-CD20 MS page. PML FAQ. ORATORIO PLS (the only anti-CD20 with PPMS data).

Spravato — Johnson & Johnson

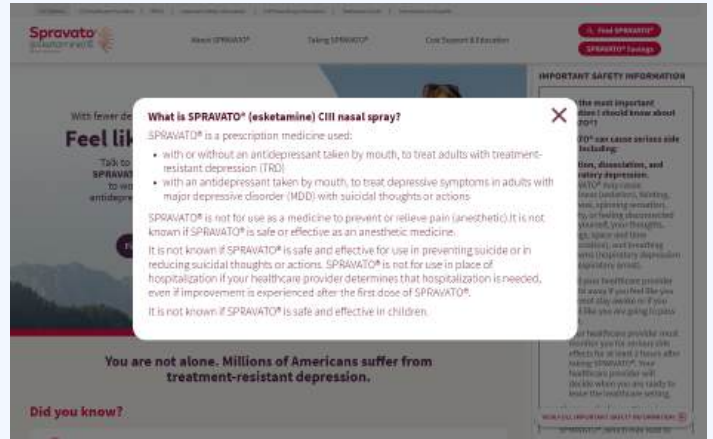
Treatment-resistant depression (TRD), intranasal · spravato.com

GEO SCORE

6.0 /10

Narrative clarity	<div style="width: 75%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.5/2
Q/A FAQ	<div style="width: 50%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.0/2
HCP depth	<div style="width: 50%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.0/2
Authority / Freshness	<div style="width: 50%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.0/2
Multilingual / Geo	<div style="width: 75%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.5/2

Source: <https://www.spravato.com>



GEO STRENGTHS

- REMS (Risk Evaluation and Mitigation Strategy) well explained
- Many TRD patient stories with diverse skin tones
- Locator for certified clinics

GEO WEAKNESSES

- Dissociation / abuse potential poorly demystified for patients
- No comparison with Auvelity or upcoming psychedelics (psilocybin)
- Minimal patient FAQ

THE CONSULTANT'S TAKE

Spravato is unique: an in-clinic TRD treatment with strict REMS. The site handles the journey well but could better address patient fears (dissociation, dependence). LLM-friendly overall.

BEST PRACTICE

Actionable recommendation. Dissociation / dependence FAQ. 'What happens during a session?' page transcribed. KOL psychiatrist videos with transcripts.

Vyndaqel / Vyndamax — Pfizer

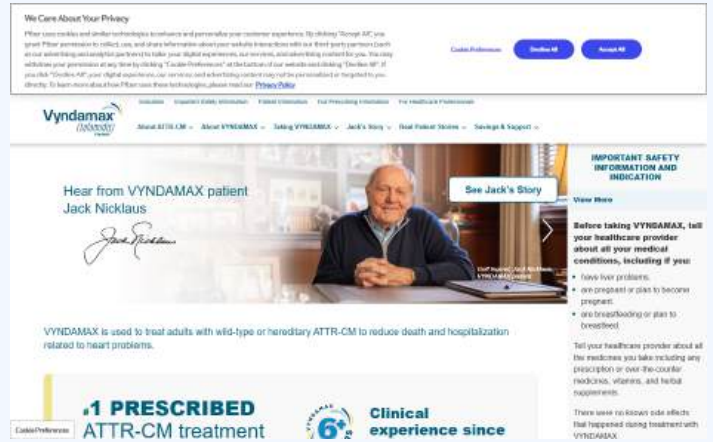
ATTR-CM (transthyretin amyloid cardiomyopathy) · vyndaqel.com / pfizerforall.com/attr-cm

GEO SCORE

7.5 /10

Narrative clarity	<div style="width: 75%;"></div>	1.5/2
Q/A FAQ	<div style="width: 75%;"></div>	1.5/2
HCP depth	<div style="width: 75%;"></div>	1.5/2
Authority / Freshness	<div style="width: 75%;"></div>	1.5/2
Multilingual / Geo	<div style="width: 75%;"></div>	1.5/2

Source: <https://www.pfizerforall.com/attr-cm/>



GEO STRENGTHS

- 'Could It Be ATTR-CM?' disease-awareness site — a GEO unbranded model
- Online Doctor Finder + Assessment Tool
- Structured diagnostic FAQ

GEO WEAKNESSES

- Acoramidis (Atruby) competitive launch — defensive narrative still to build
- Vyndaqel vs Vyndamax differentiation unclear for patients
- No detailed PLS for ATTR-ACT and ATTR-LIFE

THE CONSULTANT'S TAKE

Vyndaqel is a major case study referenced across the GEO literature. PfizerForAll / ATTR-CM is one of the finest disease-awareness hubs in pharma. Now threatened by Atruby (acoramidis).

BEST PRACTICE

Actionable recommendation. Strengthen 'Why tafamidis' against acoramidis. Long-duration patient stories. Wikipedia stewardship is critical.

Hemlibra — Roche / Genentech

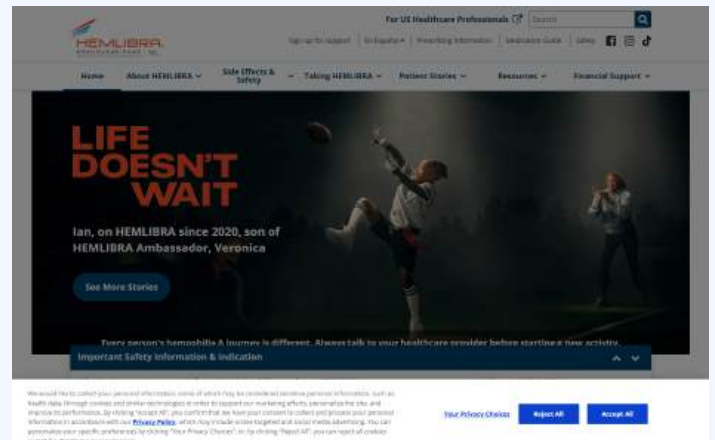
Hemophilia A with/without inhibitors (bispecific) · hemlibra.com

GEO SCORE

7.0 /10

Narrative clarity	<div style="width: 100%;"><div style="width: 100%;"></div></div>	1.5/2
Q/A FAQ	<div style="width: 50%;"><div style="width: 50%;"></div></div>	1.0/2
HCP depth	<div style="width: 100%;"><div style="width: 100%;"></div></div>	1.5/2
Authority / Freshness	<div style="width: 100%;"><div style="width: 100%;"></div></div>	1.5/2
Multilingual / Geo	<div style="width: 100%;"><div style="width: 100%;"></div></div>	1.5/2

Source: <https://www.hemlibra.com>



GEO STRENGTHS

- Substantial 'Patient Stories' section with 'Meet Our Community'
- Bispecific antibody concept demystified
- HAVEN 1-4 trials referenced
- Documented GEO case study (framework case study 5)

GEO WEAKNESSES

- No FAQ schema markup
- Competition with Altuviiio (PEG factor VIII) and gene therapy (Roctavian) under-addressed
- HAVEN-7 pediatric data under-leveraged

THE CONSULTANT'S TAKE

Hemlibra is exemplary on patient storytelling and features in reference GEO case studies. The next challenge: address gene therapy (Roctavian) as a competing alternative.

BEST PRACTICE

Actionable recommendation. FAQ schema. 'Hemlibra vs PEG FVIII vs gene therapy' page (compliance-safe). Maintain storytelling.

Vyvgart — argenx

Autoimmune myasthenia gravis (anti-FcRn) — Hytrulo SC · vyvgart.com

GEO SCORE

6.5 /10

Narrative clarity	<div style="width: 50%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.5/2
Q/A FAQ	<div style="width: 50%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.0/2
HCP depth	<div style="width: 50%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.0/2
Authority / Freshness	<div style="width: 50%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.0/2
Multilingual / Geo	<div style="width: 100%;"><div style="background-color: #007bff; height: 10px;"></div></div>	2.0/2

Source: <https://www.vyvgart.com>



GEO STRENGTHS

- Multi-award-winning 'My Treatment My Way' campaign (PM360 Gold 2023 Marketing Team)
- Vyvgart Hytrulo SC clearly differentiated vs IV
- Broad MG community coverage

GEO WEAKNESSES

- mymyastheniaconnection.com — JS-heavy, confirmed partial invisibility
- No comparison with Ultomiris, Rystiggo (other MG treatments)
- Short FAQ on post-infusion rebound

THE CONSULTANT'S TAKE

argenx has a brilliant patient strategy (Marketing Team of the Year 2023) but its mymyastheniaconnection hub suffers a technical anti-pattern. GEO potential is throttled by the SPA stack.

BEST PRACTICE

Actionable recommendation. Server-side rendering rebuild of mymyastheniaconnection.com. Rebound FAQ. Compliance-safe MG treatment comparisons.

Trikafta / Kaftrio — Vertex Pharmaceuticals

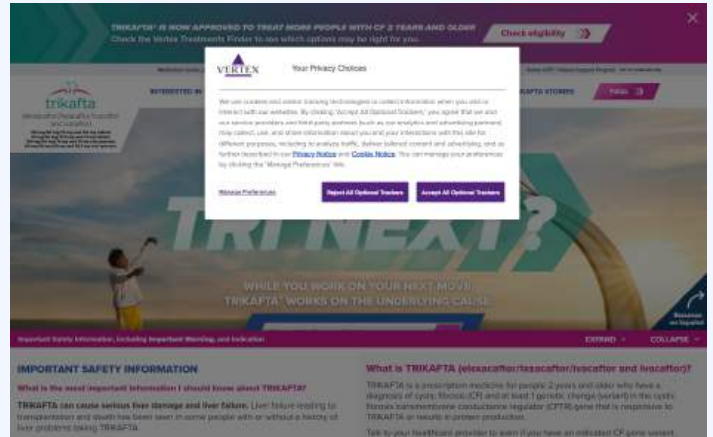
Cystic fibrosis (90% of patients) · trikafta.com / cysticfibrosis.com

GEO SCORE

8.5 /10

Narrative clarity	<div style="width: 100%; height: 10px; background-color: #007bff;"></div>	2.0/2
Q/A FAQ	<div style="width: 75%; height: 10px; background-color: #007bff;"></div>	1.5/2
HCP depth	<div style="width: 75%; height: 10px; background-color: #007bff;"></div>	1.5/2
Authority / Freshness	<div style="width: 100%; height: 10px; background-color: #007bff;"></div>	2.0/2
Multilingual / Geo	<div style="width: 75%; height: 10px; background-color: #007bff;"></div>	1.5/2

Source: <https://www.trikafta.com>



GEO STRENGTHS

- Community ecosystem (CF Foundation + cysticfibrosis.com) — massive third-party authority
- Vertex GPS support program documented
- GEO case study model (framework case study 2)
- Disease awareness via patient-organised community

GEO WEAKNESSES

- cysticfibrosis.com — Vertex JS-heavy (partial rendering)
- Future competition (CF gene therapy) needs anticipation
- No coverage of other CFTR mutations (10% ineligible)

THE CONSULTANT'S TAKE

Trikafta + the CF Foundation ecosystem is the archetype of the community GEO model. The brand enjoys strong LLM presence because of the community, not solely through its own site.

BEST PRACTICE

Actionable recommendation. SSR rebuild of cysticfibrosis.com. Page on ineligible mutations (future gene-therapy outlook). Maintain CF Foundation partnership.

3.5 — VACCINES & INFECTIOUS DISEASES

3.5 — Vaccines & infectious diseases

This section covers 4 major brands in vaccines & infectious diseases. Average score: 6.4/10.

Shingrix — GSK

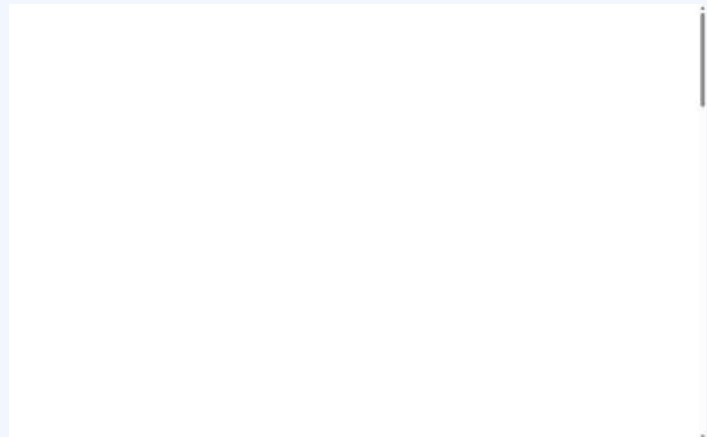
Shingles prevention in adults aged 50+ · shingrix.com

GEO SCORE

5.5 /10

Narrative clarity	<div style="width: 20%;"><div style="width: 20%;"></div></div>	1.0/2
Q/A FAQ	<div style="width: 20%;"><div style="width: 20%;"></div></div>	1.0/2
HCP depth	<div style="width: 20%;"><div style="width: 20%;"></div></div>	1.0/2
Authority / Freshness	<div style="width: 20%;"><div style="width: 20%;"></div></div>	1.0/2
Multilingual / Geo	<div style="width: 20%;"><div style="width: 20%;"></div></div>	1.5/2

Source: <https://www.shingrix.com>



GEO STRENGTHS

- ZOE-50 / ZOE-70 data named
- Two-dose schedule clearly explained
- Immunocompromised indication approved

GEO WEAKNESSES

- shingrix.com — GSK JS-heavy, incomplete rendering
- Local post-vaccination reactions need better context
- Standard FAQ

THE CONSULTANT'S TAKE

Shingrix is the shingles standard but the site suffers from a GSK technical issue (non-SSR SPA). Advantage: no serious direct competitor. Drawback: LLM narrative on autopilot.

BEST PRACTICE

Actionable recommendation. SSR rebuild. Post-vaccine pain FAQ. Keep ACIP guideline updates current.

Comirnaty — Pfizer / BioNTech

COVID-19 · comirnaty.com

GEO SCORE

Screenshot unavailable
(heavy JS / bot protection)

6.0 /10

Narrative clarity		1.5/2
Q/A FAQ		1.0/2
HCP depth		1.5/2
Authority / Freshness		1.0/2
Multilingual / Geo		1.0/2

GEO STRENGTHS

- Maximum post-pandemic awareness — massive Wikipedia footprint
- Seasonal-update data
- Abundant third-party citation (CDC, WHO, ECDC)

GEO WEAKNESSES

- LLM narrative dominated by CDC.gov rather than by Pfizer
- Misinformation pervasive in the ecosystem — Pfizer counters only partially
- No clear unification of country sites

THE CONSULTANT'S TAKE

Comirnaty is paradoxically the pharma brand most cited by LLMs... and Pfizer controls almost none of the narrative. The CDC page remains the reference. GEO strategy: amplify favourable third-party content.

BEST PRACTICE

Actionable recommendation. Documented CDC / WHO / EMA partnerships. Critical Wikipedia stewardship. Counter misinformation via accessible content.

Beyfortus — Sanofi / AstraZeneca

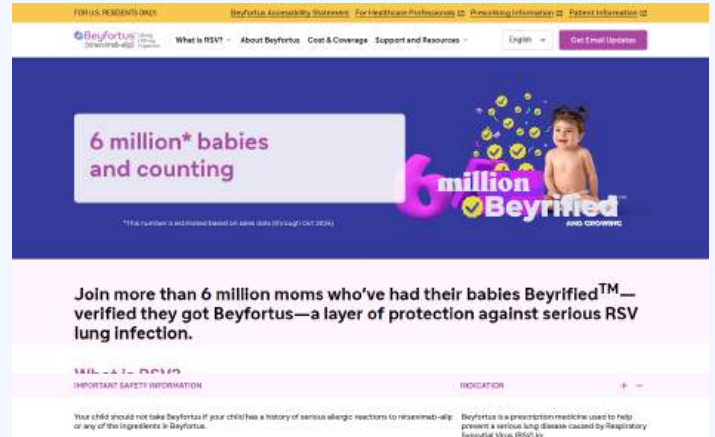
Infant RSV prevention (seasonal monoclonal antibody) · beyfortus.com

GEO SCORE

7.0 /10

Narrative clarity	<div style="width: 100%; height: 10px; background-color: #007bff;"></div>	1.5/2
Q/A FAQ	<div style="width: 100%; height: 10px; background-color: #007bff;"></div>	1.5/2
HCP depth	<div style="width: 100%; height: 10px; background-color: #007bff;"></div>	1.5/2
Authority / Freshness	<div style="width: 100%; height: 10px; background-color: #007bff;"></div>	1.0/2
Multilingual / Geo	<div style="width: 100%; height: 10px; background-color: #007bff;"></div>	1.5/2

Source: <https://www.beyfortus.com>



GEO STRENGTHS

- Seasonal launch — clear narrative: 'one injection before RSV season'
- Structured parent FAQ
- Documented ACIP CDC coverage

GEO WEAKNESSES

- Pfizer Abrysvo (maternal vaccine) competition under-addressed
- MELODY / MEDLEY PLS not surfaced
- Antibody vs vaccine differentiation not always clear for parents

THE CONSULTANT'S TAKE

Beyfortus is an outstanding GEO launch. Sanofi structured beyfortus.com from day one as a readable, factual site. One of the best 2024 launches.

BEST PRACTICE

Actionable recommendation. 'Antibody vs RSV vaccine: understanding the difference' page. MELODY PLS. Pediatric KOL coverage.

Biktarvy — Gilead Sciences

HIV — Single Tablet Regimen · biktarvy.com

GEO SCORE

7.0 /10

Narrative clarity	<div style="width: 80%;"></div>	1.5/2
Q/A FAQ	<div style="width: 80%;"></div>	1.5/2
HCP depth	<div style="width: 80%;"></div>	1.5/2
Authority / Freshness	<div style="width: 60%;"></div>	1.0/2
Multilingual / Geo	<div style="width: 80%;"></div>	1.5/2

Source: <https://www.biktarvy.com>



GEO STRENGTHS

- STR (single tablet regimen) — simple, quotable concept
- Developed patient FAQ (interactions, missed dose, travel)
- U=U (Undetectable = Untransmittable) integrated
- Exemplary DEI patient stories

GEO WEAKNESSES

- Cabenuva (bimonthly LAI) competition not addressed via comparison
- Long-term TAF effects (renal/bone) under-explained
- No GUARD PLS

THE CONSULTANT'S TAKE

Biktarvy is one of the best HIV patient hubs. Strong FAQ, strong storytelling. LLM narrative for 'best HIV treatment' regularly cites Biktarvy.

BEST PRACTICE

Actionable recommendation. 'STR vs LAI: choosing your regimen' page. PLS for GUARD (extended B/F/TAF data). Maintain patient-story leadership.

3.6 — OPHTHALMOLOGY & RARE HAEMATOLOGY

3.6 — Ophthalmology & rare haematology

This section covers 4 major brands in ophthalmology & rare haematology. Average score: 7.0/10.

Eylea / Eylea HD — Regeneron / Bayer

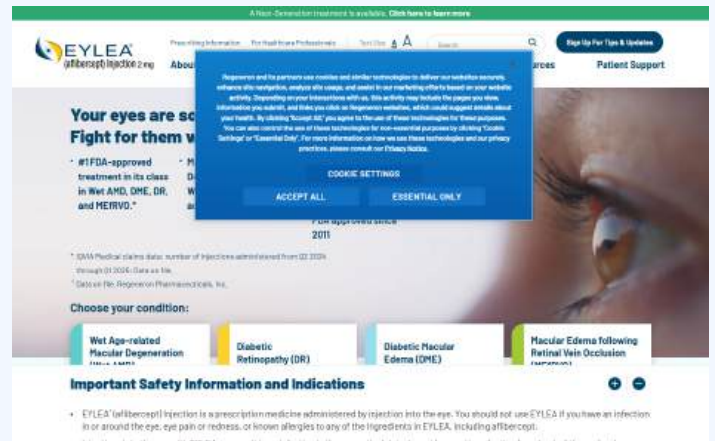
AMD, DME, RVO (anti-VEGF) · eylea.us

GEO SCORE

7.0 /10

Narrative clarity	<div style="width: 50%;"><div style="width: 50%;"></div></div>	1.5/2
Q/A FAQ	<div style="width: 50%;"><div style="width: 50%;"></div></div>	1.0/2
HCP depth	<div style="width: 50%;"><div style="width: 50%;"></div></div>	1.5/2
Authority / Freshness	<div style="width: 50%;"><div style="width: 50%;"></div></div>	1.5/2
Multilingual / Geo	<div style="width: 50%;"><div style="width: 50%;"></div></div>	1.5/2

Source: <https://www.eylea.us>



GEO STRENGTHS

- Eylea HD 8mg — extended dosing interval (16 weeks) prominently featured
- PULSAR / PHOTON / QUASAR data referenced
- Structured patient resources

GEO WEAKNESSES

- No comparison with Vabysmo (faricimab)
- Aflibercept biosimilars (Yesafili, Pavblu) now launched — brand-vs-biosimilar narrative still to build
- Mediocre FAQ

THE CONSULTANT'S TAKE

Eylea is defending its position against Vabysmo (still longer intervals) and biosimilars. Eylea HD is a strong response but GEO communication is not yet aligned with this battle.

BEST PRACTICE

Actionable recommendation. Comparative modern anti-VEGF page. PLS for PULSAR / PHOTON. Injection-interval FAQ.

Vabysmo — Roche / Genentech

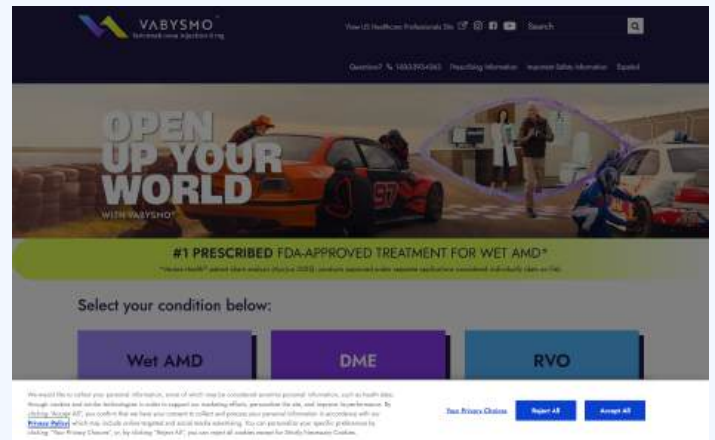
AMD, DME, RVO (bispecific anti-VEGF + anti-Ang-2) · vabysmo.com

GEO SCORE

7.0 /10

Narrative clarity	<div style="width: 75%;"><div style="background-color: #0070C0; height: 10px;"></div></div>	1.5/2
Q/A FAQ	<div style="width: 50%;"><div style="background-color: #0070C0; height: 10px;"></div></div>	1.0/2
HCP depth	<div style="width: 75%;"><div style="background-color: #0070C0; height: 10px;"></div></div>	1.5/2
Authority / Freshness	<div style="width: 50%;"><div style="background-color: #0070C0; height: 10px;"></div></div>	1.0/2
Multilingual / Geo	<div style="width: 100%;"><div style="background-color: #0070C0; height: 10px;"></div></div>	2.0/2

Source: <https://www.vabysmo.com>



GEO STRENGTHS

- First-in-class bispecific — differentiating VEGF + Ang-2 concept
- Intervals up to 16 weeks documented
- Award-winning 'A Beautiful Sight' campaign (Clio Health)

GEO WEAKNESSES

- Ang-2 mechanism poorly demystified for patients
- TENAYA / LUCERNE / YOSEMITE HCP pages need depth
- No FAQ schema

THE CONSULTANT'S TAKE

Vabysmo is the challenger threatening Eylea on dosing intervals. LLM narrative is still forming around Ang-2 — Roche has a window to establish itself.

BEST PRACTICE

Actionable recommendation. Ang-2 + VEGF MOA diagram with long alt text. PLS for TENAYA + LUCERNE. Long-interval patient injection FAQ.

Casgevy — Vertex / CRISPR Therapeutics

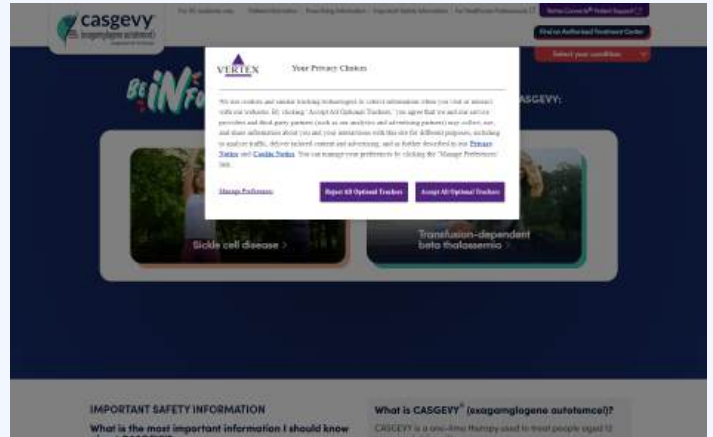
Sickle cell disease / -thalassemia (CRISPR editing) · casgevy.com

GEO SCORE

7.5 /10

Narrative clarity	<div style="width: 50%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.5/2
Q/A FAQ	<div style="width: 30%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.0/2
HCP depth	<div style="width: 50%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.5/2
Authority / Freshness	<div style="width: 50%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.5/2
Multilingual / Geo	<div style="width: 50%;"><div style="background-color: #007bff; height: 10px;"></div></div>	2.0/2

Source: <https://www.casgevy.com>



GEO STRENGTHS

- First commercialised CRISPR therapy — major scientific authority
- Full process (mobilisation, conditioning, infusion) explained
- Moving sickle-cell patient stories with DEI
- Massive media coverage (STAT, Endpoints, NYTimes)

GEO WEAKNESSES

- Cost (US\$2.2M) and access barely addressed on the site
- No comparison with Lyfgenia (Bluebird)
- Fertility after myeloablative conditioning under-treated

THE CONSULTANT'S TAKE

Casgevy is the most discussed bioethics drug of 2024. LLMs cite it heavily — but the Vertex site could better structure the pedagogy of the journey and access.

BEST PRACTICE

Actionable recommendation. CRISPR-journey hub (eligibility mobilisation conditioning infusion follow-up). Compliance-safe access / cost FAQ. Critical Wikipedia stewardship.

Soliris / Ultomiris — AstraZeneca / Alexion

PNH, atypical HUS, MG, NMOSD (anti-C5) · ultomiris.com

GEO SCORE

6.5 /10

Narrative clarity	<div style="width: 50%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.5/2
Q/A FAQ	<div style="width: 25%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.0/2
HCP depth	<div style="width: 50%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.5/2
Authority / Freshness	<div style="width: 25%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.0/2
Multilingual / Geo	<div style="width: 50%;"><div style="background-color: #007bff; height: 10px;"></div></div>	1.5/2

Source: <https://www.ultomiris.com>



GEO STRENGTHS

- Soliris Ultomiris switch well explained (2 – 8 week interval)
- Structured meningococcal REMS
- Multi-indication PNH / aHUS / MG / NMOSD

GEO WEAKNESSES

- No indication-specific hub
- Empaveli (pegcetacoplan, C3 PNH) competition not addressed
- Patient stories not prominent

THE CONSULTANT'S TAKE

Ultomiris is Alexion's defensive play against eculizumab biosimilars and new C5/C3 entrants. The GEO narrative centres on 'q8w vs q2w' — good, but it could go further.

BEST PRACTICE

Actionable recommendation. PNH / aHUS / MG / NMOSD sub-hubs. Meningococcal-vaccination FAQ. Compliance-safe C5 vs C3 (Empaveli) comparison.

PART 4

Top award-winning campaigns 2023–2026

This part analyses 30 major pharmaceutical campaigns — winners or nominees of the industry's leading awards: **Cannes Lions Health**, **PM360 Trailblazer Awards**, **MM+M Awards**, **Fierce Pharma Marketing Awards**, **Clio Health Awards**, **Shorty Awards Pharma**. Each campaign is rated under the GEO/AI-visibility lens — advertising creativity does not guarantee LLM citability. An iconic TV ad remains invisible if its storyboard and transcripts are not hosted online as structured text.

IN PLAIN ENGLISH

Campaign GEO legend:

Strong+: maximum GEO authority (media coverage, FAQ, transcripts). **Strong**: LLM citation observed regularly. **Medium+**: under-leveraged potential, transcript/blog lever missing. **Medium**: successful creative but limited LLM echo. **Weak**: campaign invisible to LLMs.

OZEMPIC — "Oh oh oh Ozempic"

Novo Nordisk · agency Novo Nordisk + in-house agency · 2017-2026 (still in rotation)

Awards: Massive cultural recognition — unawarded but viral



Concept: Iconic jingle adapted from 'Magic' (Pilot, 1974). One of the most powerful advertising earworms of the 21st century.

Channels: TV (US), digital, organic social (TikTok / X)

GEO Strong+

Brand citability via audio mnemonic. LLMs queried on 'famous pharma jingle' almost always return Ozempic. Yet almost no structured text content on ozempic.com carries that narrative.

WEGOVY — "Power of Wegovy" / "This is Me"

Novo Nordisk · agency ConcentricLife · 2024

Awards: PM360 Brand of the Year 2024; MM+M Platinum Marketer 2024



Concept: Repositioning obesity as a chronic disease through inclusive patient storytelling (varied skin tones, varied BMIs). 'This is Me' won PM360 DTC Launch Gold.

Channels: DTC TV, OOH Super Bowl, digital, social

GEO Strong

Strong creative work but wegovy.com remains JS-heavy. LLMs cite the campaign via FiercePharma / MediaPost rather than via Novo. Opportunity: transcribe patient stories on the site.

MOUNJARO / ZEPBOUND — "Healthy Skepticism"

Eli Lilly · agency Lilly USA + Saatchi Wellness · 2024

Awards: Cannes Lions Health shortlist 2024



Concept: Breaking the skepticism surrounding GLP-1s through scientific education. Athlete patient stories (Simone Biles for Mounjaro).

Channels: TV, digital, athlete endorsement (S. Biles), social

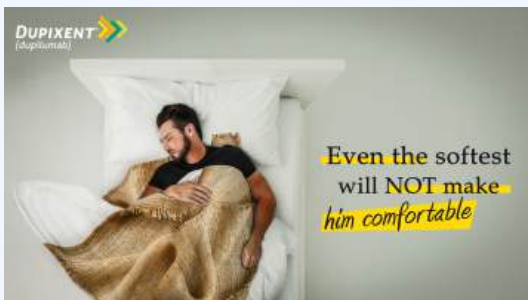
GEO Strong

Exceptional authority signal thanks to the Simone Biles endorsement — quotable by LLMs on 'pharma sports athlete'. But the Mounjaro site remains thin on transcribed patient stories.

DUPIXENT — Eczema Skin Gallery

Sanofi / Regeneron · agency EVERSANA INTOUCH · 2024

Awards: PM360 Consumer Website Gold 2024



Concept: A gallery of eczema images across every skin tone — correcting the historical Caucasian bias of dermatology imagery.

Channels: Web (dupixent.com), social, OOH

GEO Strong+

Best-in-class on extractable DEI. LLMs queried on 'eczema dark skin' increasingly cite Dupixent as the visual reference. A strong GEO authority play built on the DEI differentiator.

DUPIXENT — TikTok Social Media

Sanofi / Regeneron · agency EVERSANA INTOUCH · 2024

Awards: PM360 Social Media Finalist 2024



Concept: Official pharma presence on TikTok — accessible atopic dermatitis education with a patient-friendly tone.

Channels: Official TikTok @dupixent, Instagram, X

GEO Medium

TikTok is invisible to LLM crawlers (unless transcripts are available). The content remains valuable for pharma culture but does not directly move GEO. Best practice: republish as blog posts with transcripts.

SKYRIZI — "Nothing Is Everything"

AbbVie · agency Ogilvy Health (TV) + AbbVie corp · 2023-2024

Awards: Massive media recognition; FiercePharma TV nominee



Concept: Sonic branding ('Skyriizi') + enigmatic 'Nothing Is Everything' tagline — the absence of psoriasis plaques is everything.

Channels: US DTC TV, digital, OOH

GEO Strong

Extreme brand notoriety — LLMs cite Skyrizi first for 'best psoriasis treatment 2024'. The sonic branding reinforces recall. Site content broadly matches the narrative.

BIMZELX — "Get Yourself Back"

UCB · agency UCB + Area 23 · 2024

Awards: MM+M Gold Pharma — Area 23 / UCB

Visual unavailable

Concept: Patients reclaiming their identity thanks to PASI100 — emotional storytelling backed by the clinical superiority claim.

Channels: DTC TV, digital, KOL congresses

GEO Strong

PASI100 superiority cited by LLMs thanks to the combination of campaign + BE RADIANT / BE SURE trials. Strong inherent GEO work: the factual claim is citable.

VYVGART — "My Treatment My Way"

argenx · agency closerlook + minds + assembly · 2023-2024

Awards: PM360 Marketing Team Gold 2023; Brand Launch Team

Visual unavailable

Concept: Myasthenia gravis patient empowerment — choosing IV or SC based on lifestyle. Authentic patient voices.

Channels: DTC TV, digital, social, KOL

GEO Medium+

Excellent creative but mymyastheniaconnection.com is technically blocked (heavy JS). GEO potential significantly capped by a technical anti-pattern. Strong authority in the MG community nonetheless.

AREXVY — "Cut Short" + Audio HCP

GSK · agency Razorfish Health (TV) + CMI Media Group (audio HCP) · 2024

Awards: FiercePharma Pharma TV 2024; HCP Impact Award 2024

Visual unavailable

Concept: Emotional TV on lives disrupted by adult RSV + innovative audio HCP outreach.

Channels: DTC TV, HCP podcast, digital

GEO Strong

Audio HCP outreach is an LLM-friendly channel if transcripts are published. Abundant media coverage = stronger external GEO authority. GSK should migrate its podcast content to transcript blog posts.

BEYFORTUS — RSV Season Launch

Sanofi / AstraZeneca · agency Sanofi + local agencies · 2024-2025

Awards: Industry recognition (launch of the year)

Visual unavailable

Concept: Coordinated seasonal communication for pediatricians and parents. Structured RSV disease-awareness hub.

Channels: Digital, pediatrician KOLs, AAP / SFP partnerships

GEO Strong

beyfortus.com is one of the best 2024 launch hubs. Excellent parent FAQ and ACIP coverage. A GEO launch template.

NURTEC ODT — "Lady Gaga's Journey"

Pfizer (ex-Biohaven) · agency Pfizer + Lady Gaga House of Gucci team · 2024

Awards: International media coverage

Visual unavailable

Concept: Lady Gaga tells the story of her life with migraine. Authentic celebrity storytelling = explosive brand awareness.

Channels: TV, digital, social, media partnerships

GEO Strong

Massive third-party LLM citation thanks to Lady Gaga coverage. The 'Nurtec' name paired with 'Lady Gaga migraine' is memorised. Outstanding GEO awareness investment.

COBENFY — LinkedIn KOL Thought Leader Ads

Bristol Myers Squibb · agency Real Chemistry · 2024-2025

Awards: Schizophrenia marketing innovation

Visual unavailable

Concept: KOL psychiatrists on LinkedIn with native sponsored content — a B2HCP marketing innovation.

Channels: Native LinkedIn, APA congresses

GEO Medium+

LinkedIn content is poorly visible to general crawlers — citable by LLMs only if republished as blog. Reinforce with public transcripts.

VABYSMO — "A Beautiful Sight"

Roche / Genentech · agency Genentech + in-house agency · 2024

Awards: Clio Health Bronze 2024

Visual unavailable

Concept: AMD patient stories — preserving the gaze on what matters. Emotion + accessibility.

Channels: DTC TV, digital, OOH

GEO Strong

Strong creative, Vabysmo site decently structured.

Campaign + site combination = GEO authority forming around 'next-generation AMD treatment'.

LEQEMBI — "You Still Can Be"

Eisai / Biogen · agency Eisai + digital agencies · 2024-2025

Awards: Significant Alzheimer's media coverage



Concept: Early-Alzheimer's patients who continue to live. Hope, not miracle. Addressing the cognitive stigma.

Channels: DTC TV, digital, Alzheimer association partnerships

GEO Strong

The 'early / treatable' Alzheimer's narrative is new. LLMs are starting to embed Leqembi as a reference. Risk: Kisunla/donanemab competition.

CASGEVY — Launch

Vertex / CRISPR Therapeutics · agency Vertex + scientific agencies · 2024

Awards: Massive editorial coverage (STAT, NYT, Nature)



Concept: Launch of the first commercial CRISPR drug — sickle cell disease, then α -thalassemia.

Channels: Massive earned media, ASH congress, KOL

GEO Strong+

Massive LLM citation thanks to media + bioethics coverage. Wikipedia entry for exa-cel is extremely thorough. A model of external authority (D6 in the framework).

CAPLYTA — "Breaking the Stigma"

Johnson & Johnson · agency J&J; + corporate agencies · 2024

Awards: PM360 Trailblazer Video/TV Silver 2025

Visual unavailable

Concept: Bipolar I/II patient stories — breaking the stigma without minimising the illness.

Channels: DTC TV, digital, DBSA partnerships

GEO Strong

Bipolar / mental-health territory = LLMs sensitive to information quality. A respectful campaign strengthens J&J;'s GEO authority in psychiatry.

TEZSPIRE — "Real Patient Voices"

AstraZeneca / Amgen · agency Imre · 2025

Awards: PM360 Social Media Gold 2025

Visual unavailable

Concept: Severe asthma patients telling it as it is. No actors — real community voices.

Channels: Social (Instagram, TikTok, YouTube), digital, blog

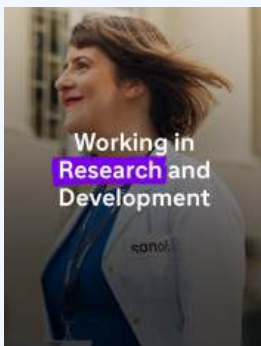
GEO Strong

Real patient voices = strong authenticity signal for LLMs (if transcribed). Provided patient stories are hosted on tezspire.com with transcripts.

SANOFI — "Chasing the Miracles of Science"

Sanofi · agency VML Creative · 2025

Awards: Cannes Lions 2025 shortlist Industry Craft



Concept: Sanofi corporate repositioning — real patients (Nadine) at the centre, manifest scientific ambition.

Channels: Global TV, digital, OOH, sports sponsorship (Tour de France)

GEO Strong+

Very strong media coverage (FiercePharma, MediaPost, Campaign). sanofi.com corporate hub is solid. Outstanding transversal brand authority that lifts every Sanofi product in LLM citation.

ASTRAZENECA — "What Science Can Do"

AstraZeneca · agency AZ corp + in-house agency · 2023-2025

Awards: Shorty Awards Pharma 2024; MM+M



Concept: Human potential unlocked by science. Patients + researchers in narrative symbiosis.

Channels: Global TV, digital, social, sponsorship

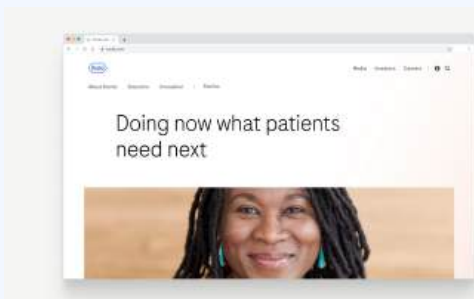
GEO Strong+

An exemplary corporate platform — AstraZeneca Open Innovation amplifies LLM scientific citability. One of the top five pharma corporate GEO hubs.

ROCHE — "Doing Now What Patients Need Next"

Roche / Genentech · agency Roche corp · Legacy 2010s-2025 (still active)

Awards: Industry reference



Concept: Iconic corporate tagline. Long-term commitment to the future pipeline.

Channels: Global, HR / careers, scientific

GEO Strong

Strong Roche corporate presence, but less tied to product brands than Sanofi. roche.com is a good hub but lacks aggregated patient storytelling. A GEO opportunity.

ABBVIE — "I Am"

AbbVie · agency AbbVie + creative agencies · 2024-2025

Awards: FiercePharma coverage



Concept: Patients asserting their identity beyond their disease. Emotion + dignity.

Channels: AbbVie corporate brand, digital, TV mood films

GEO Strong

Reinforces AbbVie's narrative authority in immunology / oncology. abbvie.com is well structured and cited by LLMs.

PFIZER — "Science Will Win"

Pfizer · agency Grey Health · 2020-2025 (continued, Season 6 oncology 2024)

Awards: Multi-awarded at Cannes, Clio



Concept: Pfizer corporate platform born from the pandemic — Season 6 dedicated to oncology in 2024.

Channels: Global, digital, patient documentary video

GEO Strong+

One of the largest pharma corporate platforms.

Multi-season = durable narrative authority. Transversal LLM citability across Pfizer brands.

J&J; — "For All You Love"

Johnson & Johnson · agency J&J; corp + agencies · 2023-2025

Awards: Global media coverage



Concept: Corporate repositioning post-Kenvue (consumer health) spinoff — J&J; becomes a pure pharma + medtech company.

Channels: Global TV, digital, sponsorship

GEO Strong

Brand authority reinforced after the spinoff. jnj.com is now focused on pharma + medtech, more legible for LLMs.

BMS — "Transforming Patients' Lives"

Bristol Myers Squibb · agency BMS + agencies · 2024-2025

Awards: FiercePharma coverage



Concept: Corporate promise centred on therapeutic transformation — particularly onco / heme.

Channels: Investor relations, corporate, careers

GEO Medium+

Well-maintained BMS corporate brand. Cited by LLMs on 'biopharma oncology'. Could amplify patient storytelling.

LILLY — 150 years + "Making Life Better"

Eli Lilly · agency Lilly corp + Campaign US · 2024 (anniversary)

Awards: Campaign US coverage



Concept: 150th anniversary — Lilly's scientific heritage as narrative (insulin 1923, GLP-1 2020s).

Channels: Global corporate, HR, sports sponsorship (Indianapolis 500)

GEO Strong

The '150 years' narrative reinforces Lilly's LLM E-E-A-T. Lilly cited as 'insulin founder / GLP-1 leader' thanks to this historical framing.

KEYTRUDA — "Teresa: Family"

Merck · agency Merck + Ogilvy Health · 2023-2024

Awards: iSpot.tv high reach



Concept: Longitudinal patient story — Teresa, NSCLC, alive thanks to immunotherapy.

Channels: DTC TV, digital, print journal

GEO Strong

Extreme TV reach + medical-journal print presence = dual signal (patient + HCP). LLM citability for 'Keytruda patient experience NSCLC'.

OPDIVO + YERVOY — Combination Immunotherapy

Bristol Myers Squibb · agency BMS + agencies · 2024

Awards: Industry coverage



Concept: Combination immunotherapy explained for advanced melanoma / dMMR CRC.

Channels: DTC TV, HCP, digital, congresses

GEO Medium+

Combination therapy is an HCP / clinical topic — the BMS site falls short of allowing LLMs to cite it in depth.

ELIQUIS — "Tasting What's Next"

BMS / Pfizer · agency Eliquis Alliance · 2025

Awards: Cannes Lions Health shortlist



Concept: Patients enjoying life again post-AF. Warm storytelling.

Channels: DTC TV, digital, OOH

GEO Strong

eliquis.com has a very strong FAQ — the creative reinforces it. Eliquis is cited on 'best DOAC' thanks to this campaign + site coherence.

CARVYKTI — First CAR-T TV ad

Johnson & Johnson / Legend · agency J&J; + agencies · 2024-2025

Awards: BioPharma Dive coverage — first DTC CAR-T



Concept: First consumer-facing TV spot for a CAR-T — multiple myeloma, explained simply.

Channels: DTC TV, digital, KOL

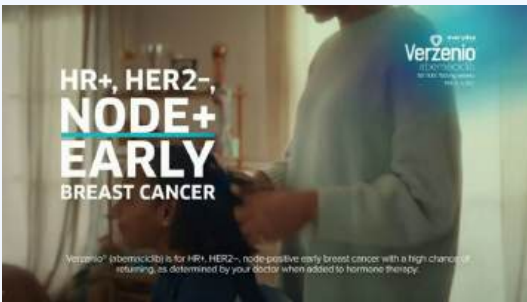
GEO Strong

First of its kind = strong media coverage. Good GEO authority forming. carvykti.com must follow to capitalise.

VERZENIO — "Being Here"

Eli Lilly · agency Lilly + agencies · 2024

Awards: iSpot.tv reach + Cannes nomination



Concept: Presence as therapeutic goal — being there for loved ones.

Channels: DTC TV, digital, women's press

GEO Medium+

Strong emotional creative but the Verzenio site is under-resourced to capitalise. LLMs queried on 'Verzenio adjuvant high-risk EBC' return monarchE on PubMed.

8 creative trends 2024–2026

1. The jingle and sonic-branding explosion

Skyrizi ('Skyriizi'), Ozempic ('Oh oh oh'), Cosentyx, Otezla. Sound becomes a brand signature — an indirect GEO tactic via brand awareness. Must be complemented with on-brand text content.

2. Patient empowerment and transcribed patient stories

Tezspire 'Real Patient Voices', Vyvgart 'My Treatment My Way', the Dupixent Skin Gallery. Public transcription is the GEO condition. Videos without transcripts remain mute for LLMs.

3. Unbranded disease awareness

PfizerForAll/ATTR-CM, Genentech 'Inequality You Can't Ignore'. Freed from FDA Rx constraints. The single most powerful GEO model for under-diagnosed diseases.

4. Physician TikTokers and patient influencers

A massive trend but invisible to LLMs (TikTok is not crawlable). Must be replicated as blog + transcripts to capture the GEO value.

5. AI in pharma content creation

Sanofi 'Badge of Honor' (FCB Health NY) winner of Fierce 'Best Use of AI' 2025. Accelerates production but still requires human MLR validation.

6. The GLP-1 revolution and mega-budget campaigns

Ozempic, Wegovy, Mounjaro, Zepbound — record DTC budgets. The LLM narrative is dictated by patients on TikTok rather than by the brands themselves.

7. Premium creative and the return of craft

AstraZeneca 'What Science Can Do', Pfizer 'Science Will Win', Sanofi 'Chasing Miracles' — corporate long-form films with real patients. Media coverage = authoritative LLM backlinks.

8. Rare-disease campaigns and ultra-targeting

Acadia 'More to Parkinson's', Vyvgart, Casgevy. A narrow audience but a deeply engaged community — disproportionate GEO authority.

PART 5

HCP medical content

HCP medical content — brand HCP sites, continuing medical education (CME) platforms, manufacturer portals, medical congresses, MedComms agencies — is probably the largest editorial production hub in pharma. And yet, paradoxically, it is also the content least visible to LLMs. The reason is structural: **the pharma tradition of protecting HCP information behind login mechanically creates total GEO invisibility.**

WATCH OUT

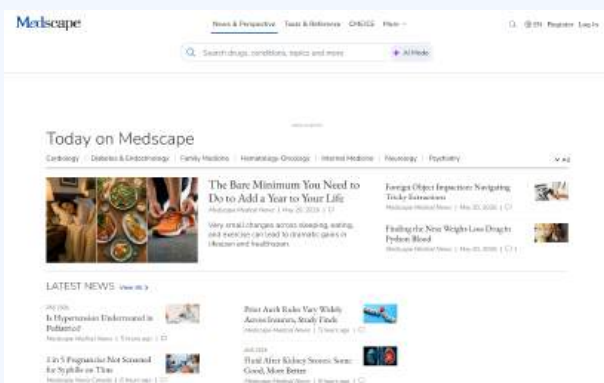
The walled-garden paradox. The more an HCP platform is protected by verified-NPI login (MerckConnect, Janssen Medical Cloud, Lilly Pro Connect, AbbVie Pro), the more its high-quality scientific content is invisible to the GPT, Claude and Perplexity crawlers. When a physician asks ChatGPT 'mechanism of action of risankizumab?', the AI cannot cite content from Janssen Medical Cloud — it cites Wikipedia, UpToDate or open-access PubMed publications. The brand loses control of the scientific narrative.

The 12 major manufacturer HCP portals

Portal	Manufacturer	URL	Accessibility	GEO visibility
MerckConnect	Merck	merckconnect.com	Walled — NPI login required	Weak
Janssen Medical Cloud	J&J;	janssenmedicalinformation.com	Hybrid — public + gated tiers	Medium
Lilly Pro Connect	Lilly	lillypro.com	Walled — HCP auth	Weak
Pfizer Pro	Pfizer	pfizerpro.com	Hybrid	Medium
AstraZeneca AZ Connect	AstraZeneca	azmedical.com	Hybrid + Open Innovation	Medium+
AbbVie Pro	AbbVie	abbviepro.com	Walled	Weak
BMS Access Support / HCP	BMS	bms.com/healthcare-professionals	Hybrid	Medium
Novartis HCP hub	Novartis	novartismedinfo.com	Hybrid	Medium
Genentech Pro / Roche	Roche	gene.com/medical-professionals	Hybrid + open content	Medium+
Sanofi Genzyme HCP	Sanofi	sanofigenzyme.com	Hybrid	Medium
Gilead HCP	Gilead	gileadhcp.com	Walled US, partial ex-US	Weak
GSK Health Partner	GSK	gskhealthpartner.com	Walled	Weak

Reference CME and HCP platforms

Medscape and Univadis are the two transversal HCP platforms most cited by LLMs on clinical questions. Their domain authority is high, they are HTML-accessible, and their CME content is validated by named reviewers. They represent both an opportunity and a risk for brands: publishing data through these platforms guarantees citability but hands the narrative to a third party.



Medscape — US HCP reference · <https://www.medscape.com>



Univadis FR — French HCP reference · <https://www.univadis.fr>

2026 medical congress calendar

International medical congresses remain the most important editorial production hub in pharma. ASCO (oncology) draws more than 40,000 attendees every year. AHA (cardiology), ADA (diabetes), EASD (European diabetes), EULAR (rheumatology), AAD (dermatology), AAN (neurology) are all major moments of poster, oral and late-breaker production. **But that content remains largely invisible to LLMs** until it is republished as structured blog/HTML on brand sites.

Congress	Area	Window	2026 location	Attendees
ASCO	Oncology	May 30 – Jun 3	Chicago	40,000+
ASCO GI	GI Oncology	January	San Francisco	5,000
ASCO GU	GU Oncology	February	San Francisco	5,000
ESMO	EU Oncology	October	Madrid 2026	30,000
ASH	Haematology	December	Orlando 2026	30,000
AHA Scientific Sessions	Cardiology	November	Chicago 2026	20,000
ESC Congress	EU Cardio	Aug–Sep	Madrid 2026	30,000
ADA Scientific Sessions	Diabetes	June	Chicago	15,000
EASD	EU Diabetes	Sep–Oct	Vienna 2026	15,000
EULAR	EU Rheumatology	June	Barcelona 2026	15,000
AAD	Dermatology	March	San Diego	20,000
EADV	EU Dermatology	Sep–Oct	Madrid	10,000
AAN	Neurology	April	Boston 2026	15,000
ECTRIMS	Multiple sclerosis	October	Athens	10,000
AAO	Ophthalmology	October	Las Vegas	25,000
APA	Psychiatry	May	Los Angeles	15,000



ASCO oncology — representative pharma booth, Chicago · <https://condit.com>

Reference MedComms agencies

The medical agency pool is dominated by a handful of international players covering both scientific production (publications, abstracts, slide decks) and the professional communications ecosystem. These agencies are the conveyor belt between R&D; and the market. Their ability to produce indexable Plain Language Summaries has become a key GEO criterion.

Real Chemistry. Independent US — MedComms + advertising agency. Real Chemistry / Starpower produced 'Could It Be HCM?' (PM360 finalist 2024).

Klick Health. Toronto — Cannes Lions Innovation Grand Prix 2024 for 'Voice 2 Diabetes' (KVI Brave Fund).

McCann Health / IPG Health. IPG holding — one of the largest global pharma networks.

EVERSANA INTOUCH. Agency network, 5 PM360 Trailblazer wins in 2024 — Dupixent Skin Gallery, COPD, VYEPTI.

VML Health (formerly VMLY&R; / Wunderman). WPP — VML Creative for Sanofi 'Chasing Miracles'.

Havas Lynx. Havas Health — Amgen 'Listen to Your Heart' (Fierce Pharma TV 2025).

Razorfish Health. Publicis — GSK Arexvy 'Cut Short' (Fierce TV 2024).

Area 23. IPG Health — Bimzelx 'Get Yourself Back' (MM+M Gold). Eyedar (Horizon, Clio).

Inizio Evoke. MedComms — 'Listening Between the Lines' (Imbruvica J&J;/AbbVie), PM360 AI/Data Gold 2025.

CMI Media Group. HCP-specialised media buying — GSK Arexvy audio (HCP Impact Award).

Ogilvy Health. WPP — Keytruda.

ConcentricLife. Acquired by Indegene — Wegovy 'This is Me'.

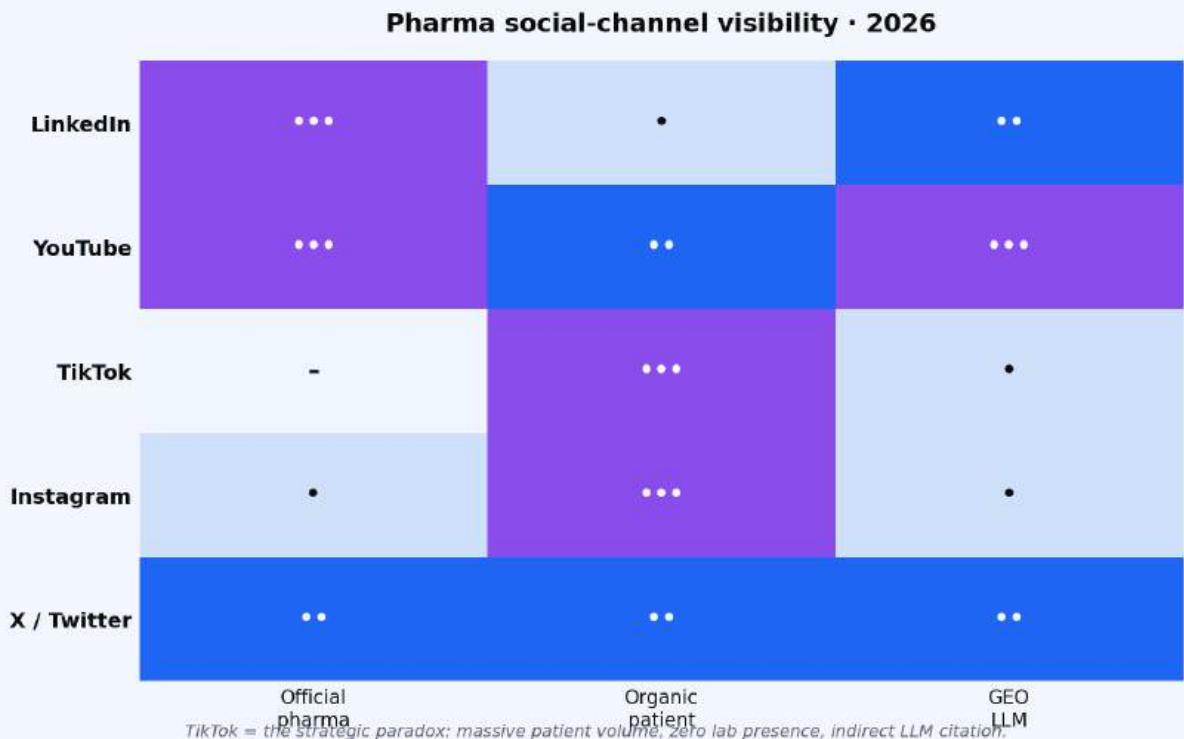
BEST PRACTICE

Inizio Evoke 'Listening Between the Lines' (PM360 AI/Data Gold 2025). This Imbruvica campaign uses AI to identify the BTK-switching triggers observed on forums and social networks, then generates HCP content targeting those zones of doubt. From a GEO standpoint, it is the archetype of strategic listening — not to 'listen' but to structure indexable content that answers prescribers' real questions. A model to replicate for any mature brand losing SOV.

PART 6

Social, video, influence, communities

Pharma social in 2026 is paradoxical: **TikTok has become the largest mass-consumer health medium** (millions of views on #Ozempic, #Wegovy, #SkinJourney) yet pharma itself is barely present officially. LLMs see a tiny share of those social posts but they do read the press echo (FiercePharma, MediaPost, StatNews). LinkedIn is establishing itself as the HCP-friendly channel with native KOL Thought Leader Ads (BMS Cobenfy, Real Chemistry). YouTube remains a universal channel whose auto-transcripts are sometimes read by LLMs.



LLM-visibility matrix by pharma social channel (Aikka 2026)

LinkedIn — manufacturer ranking in 2026

LinkedIn became, in 2024–2026, the primary corporate channel for manufacturers. The most-followed CEOs (Albert Bourla, Dave Ricks, Joaquin Duato, Vas Narasimhan) publish regularly and their posts generate tens of thousands of interactions. Thought Leader Ads (sponsored employee or KOL posts) have become an innovative HCP format — BMS Cobenfy uses them with Real Chemistry.

Manufacturer	Followers	CEO / 2026 notes
Pfizer	~5.1M followers	Albert Bourla — top-5 health CEO on LinkedIn
J&J;	~3.6M	Joaquin Duato — repositioning post-Kenvue spinoff
AstraZeneca	~3.0M	Pascal Soriot — highly active on Science
Roche / Genentech	~2.4M / 1.1M	Thomas Schinecker — pipeline focus
Novartis	~2.3M	Vas Narasimhan — top-3 health CEO on LinkedIn
Merck	~2.2M	Robert Davis — active on Keytruda QLEX
Sanofi	~2.4M	Paul Hudson — 'Chasing the Miracles'
Lilly	~1.4M	Dave Ricks — top-10 CEO on LinkedIn
AbbVie	~1.7M	Robert Michael — amplifies 'I Am'
BMS	~1.4M	Christopher Boerner

IN PLAIN ENGLISH

LinkedIn followers are mostly employees, recruiters and investors. Corporate content posted on LinkedIn is rarely read directly by LLMs (LinkedIn limits crawling). But major announcements (product launch, FDA approval) are picked up by trade media — and it is those media echoes that feed LLM source pools.

YouTube — top pharma channels and MoA animations

YouTube is the video channel where pharma has invested heavily since 2020. Nearly every DTC TV campaign is also published on YouTube. Auto-generated transcripts are sometimes read by LLMs (notably Google AI Overviews). Mechanism-of-action (MoA) animations are especially valuable content when accompanied by a rich text description.

Top official channels 2026: Pfizer, Sanofi (Chasing Miracles), AstraZeneca (What Science Can Do podcast and series), Roche (Doing Now), Genentech (Patient Stories), Merck (Keytruda commercials), Lilly (150-year anniversary), J&J; (For All You Love), AbbVie (I Am), BMS (Transforming).

TikTok — the most strategic paradox

TikTok is, in 2026, the largest mass-consumer health medium by view volume. **#Ozempic**, **#Wegovy**, **#Mounjaro**, **#DupixentSkin**, **#SkyriziJourney** rack up billions of views — but those views are generated by patients themselves, almost never by brands. Pharma remains paralysed by OPDP / ANSM fear. The GEO consequence: the narrative is dictated by patients (positively and negatively). LLMs see the indirect transcripts (FiercePharma, MediaPost), not the videos.

WATCH OUT

Ozempic face and **Wegovy microdosing** are TikTok trends that triggered massive media coverage and therefore a large LLM presence — without Novo Nordisk controlling almost anything. It is the archetype of unmanaged reputational risk in pharma omnichannel 2026.

Mapping patient communities by therapeutic area

Patient associations have become major GEO assets — third-party authority, large content footprint, dense linking, organic patient traffic. LLMs asked about 'best eczema association' cite NEA. About 'best psoriasis community': NPF. About 'best Crohn's community': CCFA. About 'rare-disease resources': NORD and EURORDIS.



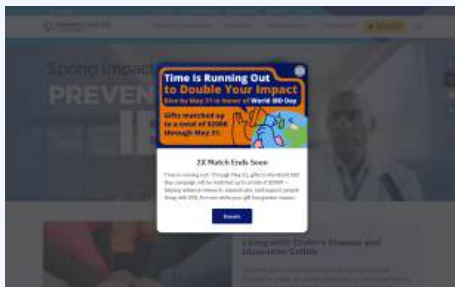
NEA — National Eczema Association
Eczema / AD

Source · <https://nationaleczema.org>



NPF — National Psoriasis Foundation
Psoriasis

Source · <https://www.psoriasis.org>



CCFA — Crohn's & Colitis Foundation
IBD

Source · <https://www.crohnscolitisfoundation.org>



NORD — Rare Diseases (US)
Rare diseases

Source · <https://rarediseases.org>



CFF — Cystic Fibrosis Foundation
Cystic fibrosis

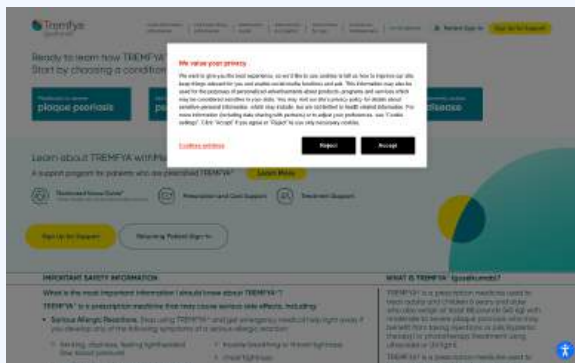
Source · <https://www.cff.org>



EURORDIS — Rare Diseases Europe
EU rare diseases

Source · <https://www.eurordis.org>

Official manufacturer patient hubs — notable examples



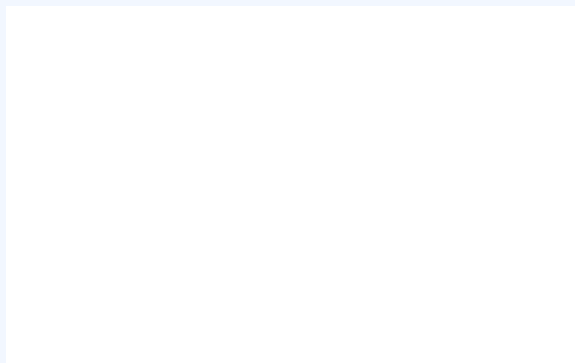
tremfyawithme.com (J&J)

Source · <https://www.tremfyawithme.com>



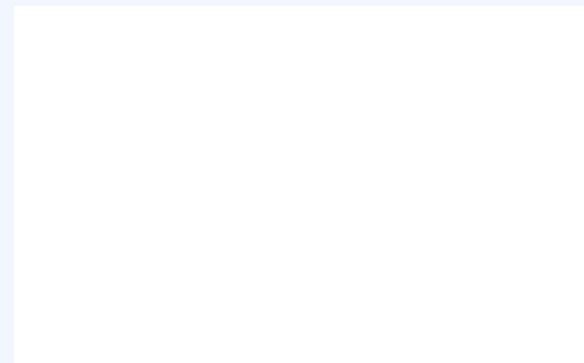
alzinfo.org (Fisher Center)

Source · <https://www.alzinfo.org>



mymyastheniaconnection.com (argenx)

Source · <https://www.mymyastheniaconnection.com>



cysticfibrosis.com (Vertex)

Source · <https://www.cysticfibrosis.com>

BEST PRACTICE

tremfyawithme.com and **alzinfo.org** represent two complementary patient-hub models. The first is a brand-aligned support hub with prescription assistance; the second is a disease-education hub sponsored by a foundation. Both maximise GEO visibility by remaining publicly accessible — that is the #1 criterion to validate.

PART 7

Patient & HCP personas

32 synthetic personas inferred from patient surveys, FDA PFDD, Nature/JCO papers and patient associations. Fictional names, factual behavioural profiles. Each persona delivers its signature queries — the raw material for structuring GEO content.

IN PLAIN ENGLISH

The persona is not a creative tool — it is a content-structuring tool. If you know which question a 48-year-old BRCA+ Sophie asks ChatGPT, you know which FAQ to write, which H2 to build, which patient hub to launch. **Persona = query. Query = content. Content = LLM citation.**

7.1 · Oncology

Three patient personas (active diagnostic pathway, biomarker recurrence, cellular haematology) and three HCP personas (academic KOL, community oncologist, lead haematologist). The most mature area in terms of patient content — but the least legible for LLMs because biomarker FAQs remain unstructured.

PATIENT · 1.1

The patient in active diagnostic pathway

Michel Renard, 65, retired teacher, Nantes / James Kowalski, 67, Ohio. Former smoker.

PATHOLOGY / STAGE

NSCLC stage IIIB-IV. PD-L1, EGFR, ALK status pending.

RESEARCH CYCLE

Pre-diagnosis phase 4-12 weeks (cough interpreted as bronchitis). Post-announcement: massive Google search "lung cancer stage 4 survival", testimonials on Genentech MyCareRoadmap, Facebook "Poumon et Vie". Second opinion at CHU/NCI. Biomarker testing often initiated by peer-supporter before the physician.

KEY INFLUENCES

Lead oncologist (absolute trust), prescribing pulmonologist, online peer-supporter, spouse.

EMOTIONAL TRIGGERS

Primary fear (6 months?). Hope for targeted therapies if mutation. Frustration with 2-4 week NGS delays. Shifts from denial to empowerment via communities.

PLATFORMS

Google, YouTube, Doctissimo/WebMD, Facebook patient groups, roche.com, [Alliance Malade Cancer Poumon](#), LUNGEvity.

INFERENCE SOURCES

Nature npj Primary Care Resp Med 2024 · Genentech MyCareRoadmap · Lung Cancer Policy Network

GEO FACT SHEET

Top observed queries:

"lung cancer stage 4 life expectancy 2024" · "NSCLC EGFR ALK mutations targeted treatment" · "chemotherapy immunotherapy lung combination" · "biomarker testing NSCLC how long results"

PATIENT · 1.2

The patient with biomarker-driven recurrence

Sophie Dumont, 48, HR executive, Paris / Rebecca Chen, 51, San Francisco. HER2-low metastatic breast cancer post-Enhertu, or BRCA+ ovarian on Lynparza.

PATHOLOGY / STAGE

HER2-low metastatic breast cancer 2nd+ line, OR BRCA+ ovarian platinum-sensitive relapse.

RESEARCH CYCLE

Highly informed patient: follows ClinicalTrials.gov, BCRF newsletters, KOL oncologist Twitter/X accounts. Searches "DESTINY-Breast phase 3" trials. Active member of "Métastatique mais pas statistique" Facebook group, MBC Alliance.

KEY INFLUENCES

KOL oncologist (sometimes different from treating physician), online patient mentor, spouse, HR/employer (sick leave).

EMOTIONAL TRIGGERS

Constant recurrence anxiety. Hope in clinical trials. Warrior identity. Long-term emotional fatigue. Funding concerns.

PLATFORMS

ClinicalTrials.gov, X (oncology KOLs), Facebook (MBC groups), [BCRF](#), patient advocacy newsletters, AstraZeneca/Daiichi sites.

INFERENCE SOURCES

Breast Cancer Research Foundation · MBC Alliance · ClinicalTrials.gov · PFDD reports breast cancer 2024

GEO FACT SHEET**Top observed queries:**

"Enhertu line of therapy HER2-low" · "Lynparza maintenance ovarian cancer BRCA" · "T-DXd trials France 2025" · "MBC second opinion oncologist NCI center"

PATIENT · 1.3

The haematology patient in cellular therapy

Karim Benali, 35, engineer, Lyon / Mike Johnson, 41, Atlanta. LBCL/DLBCL relapsed post-2L, CAR-T eligible.

PATHOLOGY / STAGE

Diffuse large B-cell Lymphoma (DLBCL) relapsed after R-CHOP, eligible for CAR-T (Yescarta, Breyanzi, Kymriah) or bispecifics.

RESEARCH CYCLE

Family decision around CAR-T eligibility (referral centre, cost, logistics). Intense YouTube search ("CAR-T testimonial"), Reddit r/Lymphoma forums, Kite/Gilead, BMS, Novartis sites. Discussion with lead haematologist + second opinion at CHU.

KEY INFLUENCES

Lead CHU haematologist, CAR-T nurse coordinator, rare peer-supporter, family caregiver.

EMOTIONAL TRIGGERS

Massive hope (durable remission possible). Fear of neuro side effects (ICANS, CRS). Apheresis logistics anxiety. Sense of urgency.

PLATFORMS

Reddit (r/lymphoma, r/cancer), YouTube CAR-T testimonials, Kite-Gilead, BMS Breyanzi, [LLS Leukemia & Lymphoma Society](#).

INFERENCE SOURCES

[LLS · Lymphoma Research Foundation](#) · [ClinicalTrials.gov CAR-T trials](#)

GEO FACT SHEET**Top observed queries:**

"CAR-T Yescarta side effects long term" · "DLBCL relapse 2nd line CAR-T eligibility" · "bispecific antibody DLBCL Epkinly Columvi" · "apheresis CAR-T process timeline"

HCP · 1.1

The academic KOL oncologist

Prof. Marc Lévesque, 54, thoracic oncologist at CLCC Gustave Roussy / Dr. Lisa Patel, 52, Memorial Sloan Kettering.

PATHOLOGY / STAGE

Principal investigator of phase 3 trials (KEYNOTE, CheckMate, DESTINY). Author of 80+ PubMed publications.

RESEARCH CYCLE

Daily monitoring of ASCO/ESMO abstracts, ASH, AACR. Reads JCO, NEJM, Lancet Oncol. Active on Twitter/X (@OncoTwitter). Presents at industry-funded satellite symposia.

KEY INFLUENCES

ASCO/ESMO KOL network, fellow investigators, industry medical affairs (advisory boards).

EMOTIONAL TRIGGERS

Academic recognition. Patient outcomes. Influence on NCCN/ESMO guidelines. Conflict-of-interest management.

PLATFORMS

PubMed, JCO, ASCO Connection, OncLive, Healio Oncology, Twitter/X, ASCO Daily News, ESMO Open.

INFERENCE SOURCES

PubMed publications · ASCO/ESMO faculty rosters · OncLive expert columns

GEO FACT SHEET**Top observed queries:**

"KEYNOTE-189 long term follow up" · "EGFR exon 20 amivantamab + lazertinib" · "ALK TKI sequencing lorlatinib brigatinib" · "DESTINY-Breast06 HER2-ultralow"

HCP · 1.2**The community / private-practice oncologist**

Dr. Catherine Mercier, 47, clinical oncologist at Centre Léon-Bérard outpatient / Dr. Robert Adams, 50, US Oncology Network.

PATHOLOGY / STAGE

60-80 patients/day, mixed solid tumours. Not an investigator. Prescription guided by guidelines.

RESEARCH CYCLE

Consults UpToDate +++ (absolute reference), NCCN guidelines, OncoLink, Medscape. Continuing-education webinars from Servier, Roche. Very limited Twitter use. Vidal/eVidal newsletter.

KEY INFLUENCES

Manufacturer MSL (Medical Science Liaison), hospital lead oncologist, hospital pharmacist.

EMOTIONAL TRIGGERS

Prescribing safety. Workload management. Pragmatic patient outcomes. Tolerability.

PLATFORMS

UpToDate (paywalled), NCCN.org, Medscape, Vidal, MesVaccins, OncoLink, manufacturer webinars.

INFERENCE SOURCES

UpToDate · NCCN guidelines · Medscape Oncology · Healio · Vidal

GEO FACT SHEET**Top observed queries:**

"NCCN NSCLC guidelines 2025 update" · "atezolizumab vs pembrolizumab first line NSCLC" · "capecitabine dose reduction hand-foot" · "T-DXd dosing schedule HER2-low"

HCP · 1.3**The specialist haematologist**

Dr. Emmanuelle Roux, 49, haematologist at CHU Lille / Dr. David Kim, 48, Stanford Cancer Center.

PATHOLOGY / STAGE

Prescribes CAR-T, bispecifics, BTKi. 30-50 patients/day. Active in multidisciplinary tumour boards.

RESEARCH CYCLE

ASH Annual Meeting is unmissable. Blood, NEJM, Lancet Haematology. Active on Twitter/X (#hemtwitter). Monitors ClinicalTrials. Webinars from Kite, BMS, AbbVie, Pfizer.

KEY INFLUENCES

ASH KOL network, CAR-T centre referrers, industry medical affairs.

EMOTIONAL TRIGGERS

Optimal therapy sequencing. ICANS/CRS management. CAR-T centre coordination.

PLATFORMS

Blood Journal, ASH Clinical News, Healio Hematology, Twitter #hemtwitter, [HemOnc.org](https://www.hemonc.org), Kite Connect.

INFERENCE SOURCES

Blood Journal · ASH Annual Meeting · HemOnc.org · ClinicalTrials.gov

GEO FACT SHEET**Top observed queries:**

"epcoritamab vs glofitamab DLBCL r/r" · "BTK inhibitor sequencing CLL acalabrutinib zanubrutinib" · "CAR-T bridging therapy DLBCL" · "MRD CLL flow cytometry"

7.2 · Immuno-dermato-rheumatology

Three patient personas (severe eczema, psoriasis with psoriatic arthritis, young-adult IBD) and three HCPs (hospital dermatologist, community rheumatologist, IBD gastroenterologist at a referral centre). The most social-media-dense area — TikTok and Instagram dictate the patient narrative.

PATIENT · 2.1

The adult with severe refractory eczema

Léa Martin, 32, UX designer, Lyon / Ashley Carter, 29, marketing manager, Brooklyn.

PATHOLOGY / STAGE

Moderate-to-severe adult atopic dermatitis (EASI >16), failure of topical corticosteroids, on Dupixent or switch Rinvoq/Cibinqo.

RESEARCH CYCLE

Initially searches Google ('adult eczema treatment'), quickly pivots to Instagram communities (#eczemaskin), Reddit r/eczema, TikTok (#dupixentjourney). Strong reliance on peer-supporters. Follows NEA (nationaleczema.org). Before prescription: searches side effects (eye issues, facial redness).

KEY INFLUENCES

Dermatologist (often remote), TikTok/Instagram peer-supporter (eczema influencer), NEA, occasionally naturopath/alternative social networks.

EMOTIONAL TRIGGERS

Social shame (visible). Sleep/nocturnal itch anxiety. Hope plus scepticism toward biologics. Long-term fear. Frustration with dermatology pathway (delays).

PLATFORMS

TikTok (#dupixentjourney), Instagram, Reddit r/eczema, NEA, dupixent.com, rinvoq.com, YouTube testimonials.

INFERENCE SOURCES

NEA patient surveys · Sanofi Dupixent Patient Journey · Reddit r/eczema thematic analysis

GEO FACT SHEET

Top observed queries:

"dupixent eye side effects" · "rinvoq vs dupixent atopic dermatitis" · "tralokinumab adby reviews" · "eczema flare diet trigger food" · "biologic eczema cost insurance"

PATIENT · 2.2

Moderate-to-severe psoriasis with psoriatic arthritis

Antoine Dubois, 43, IT project lead, Marseille / Mark Davidson, 46, Chicago.

PATHOLOGY / STAGE

Severe cutaneous psoriasis (PASI >12) + active psoriatic arthritis, on IL-17 (Cosentyx, Taltz) or IL-23 (Skyrizi, Tremfya).

RESEARCH CYCLE

Diagnosis often delayed (rheumatology + dermatology). Very active communities: NPF (psoriasis.org), Reddit r/Psoriasis, Facebook groups. Strong questioning around biologic switch. Discussion of Humira biosimilars.

KEY INFLUENCES

Dermatologist + rheumatologist (variable coordination), NPF, mature adult peer-supporter.

EMOTIONAL TRIGGERS

Chronic physical pain + visible psoriasis (double stigma). Hope for skin clearance. Fatigue. Concern about long-term cumulative biologic use.

PLATFORMS

NPF, Reddit r/Psoriasis, Facebook PsA groups, skyrizi.com, tremfyawithme.com, cosentyx.com.

INFERENCE SOURCES

NPF · TremfyaWithMe · ACR PsA guidelines

GEO FACT SHEET**Top observed queries:**

"skyrizi vs tremfya psoriatic arthritis" · "il-23 vs il-17 long term" · "humira biosimilar switch" · "cosentyx weight gain side effects" · "psoriatic arthritis joint damage MRI"

PATIENT · 2.3

Young-adult Crohn's disease patient

Camille Lemoine, 26, master's student, Bordeaux / Tyler Brooks, 24, grad student, Boston.

PATHOLOGY / STAGE

Active ileocolonic Crohn's disease, immunomodulator failure, on anti-TNF (Humira, Stelara) or Skyrizi/Rinvoq IBD.

RESEARCH CYCLE

Diagnosis often post-ER/colonoscopy. Highly digital-native: TikTok (#crohnsdisease 800M+ views), Reddit r/crohnsdisease, Instagram ostomy-bag visibility. CCFA newsletters.

KEY INFLUENCES

IBD-centre gastroenterologist, IBD nurse, CCFA peer-supporter, TikTok IBD community.

EMOTIONAL TRIGGERS

Symptom shame (diarrhoea, fistulas). Anxiety around university/work peaks. Young chronic-disease identity. Highly supportive online community.

PLATFORMS

TikTok #crohnsdisease, Reddit r/crohnsdisease, CCFA, Instagram (ostomy advocates), Skyrizi/Rinvoq sites.

INFERENCE SOURCES

CCFA · Sanofi IBD patient surveys · Reddit IBD thematic

GEO FACT SHEET**Top observed queries:**

"skyrizi crohn induction maintenance" · "rinvoq ulcerative colitis vs crohns" · "stelara fail next biologic crohn" · "ostomy bag tips young adult" · "crohn flare pregnancy"

HCP · 2.1

The hospital biologics dermatologist

Dr. Hélène Tavernier, 51, AP-HP Saint-Louis / Dr. Sarah Goldstein, 49, NYU Langone.

PATHOLOGY / STAGE

Hospital practice + biologics consultations. Prescribes Dupixent, IL-17, IL-23, JAK.

RESEARCH CYCLE

EADV Congress (annual), AAD Annual Meeting. JAAD, BJD readings. Moderate Twitter use (#dermatwitter). Webinars from Sanofi-Regeneron, J&J, AbbVie. UpToDate +++ for decisions.

KEY INFLUENCES

International Eczema Council, NEA medical board, pharma medical affairs.

EMOTIONAL TRIGGERS

Optimal biologic switch, side-effect management (Dupixent eye, JAK MACE risk). PRO outcomes (DLQI, POEM).

PLATFORMS

UpToDate, JAAD, BJD, Medscape Derm, EADV, AAD, [International Eczema Council](#).

INFERENCE SOURCES

JAAD · BJD · [International Eczema Council](#) · NEA medical advisory

GEO FACT SHEET**Top observed queries:**

"dupixent eye conjunctivitis management" · "JAK inhibitor cardiovascular safety atopic dermatitis" · "tralokinumab adby pivotal" · "upadacitinib dose escalation eczema"

HCP · 2.2

The community rheumatologist

Dr. François Berton, 56, private practice Paris / Dr. Anne Henderson, 54, private practice Atlanta.

PATHOLOGY / STAGE

60-80 patients/day, RA + spondyloarthritis + PsA. Experienced biologics prescriber.

RESEARCH CYCLE

ACR Annual Meeting, EULAR. Arthritis & Rheumatology, Annals of Rheumatic Diseases. Webinars from AbbVie, Lilly, Pfizer, J&J.; Vidal for daily prescribing.

KEY INFLUENCES

Hospital lead rheumatologist, manufacturer MSL, community pharmacist.

EMOTIONAL TRIGGERS

Patient workflow (prescription load), side-effect management, biologic switch on failure.

PLATFORMS

ACR, EULAR, ARD, A&R, Vidal, Medscape Rheum, manufacturer webinars, UpToDate.

INFERENCE SOURCES

ACR guidelines · EULAR recommendations · Vidal · UpToDate

GEO FACT SHEET**Top observed queries:**

"rinvoq vs xeljanz rheumatoid arthritis JAK safety" · "biosimilar humira switching cost" · "psoriatic arthritis ACR70 IL-17 vs IL-23"

HCP · 2.3

The IBD gastroenterologist at a referral centre

Dr. Patrick Vermeire, 48, CHU Bordeaux IBD unit / Dr. Maria Rodriguez, 47, Mount Sinai IBD Center.

PATHOLOGY / STAGE

Advanced IBD biologics prescriber. Trial investigator.
Active on CCFA medical board.

RESEARCH CYCLE

DDW (Digestive Disease Week), UEG Week, ECCO Congress. Gastroenterology, AJG, Gut. **CCFA** medical resources.

KEY INFLUENCES

ECCO/CCFA KOL network, IBD nurses, fellow investigators.

EMOTIONAL TRIGGERS

Optimal biologic sequence, response biomarkers, complex fistula management.

PLATFORMS

Gastroenterology, AJG, Gut, ECCO, DDW, CCFA, UpToDate, Twitter (#IBDscope).

INFERENCE SOURCES

Gastroenterology · ECCO guidelines · CCFA · DDW · AJG

GEO FACT SHEET**Top observed queries:**

"skyrizi induction crohn vs stelara" · "rinvoq UC dose 30 vs 45 mg" · "mirikizumab vs ustekinumab" · "vedolizumab subQ vs IV maintenance"

7.3 · Cardio-metabolic & obesity

Three patients (late-diagnosed ATTR-CM, GLP-1 obesity, chronic HFpEF) and three HCPs (cardio HF specialist, GLP-1-prescribing endocrinologist, GP facing Wegovy/Ozempic demand). The area most exposed to TikTok GLP-1 narratives — the patient story almost entirely escapes the brands.

PATIENT · 3.1

The late-diagnosed ATTR-CM patient

Pierre Lefèbvre, 72, retired engineer, Toulouse / William Stephens, 74, Tampa.

PATHOLOGY / STAGE

Transthyretin amyloid cardiomyopathy (ATTR-CM), diagnosis after HMDP/PYP scintigraphy following diagnostic odyssey. On Vyndaqel (tafamidis) or eligible for vutrisiran.

RESEARCH CYCLE

Median wandering of 4-6 years (per registries). Massive post-diagnosis search on amyloidosis.org, Pfizer Vyndaqel.com (the most comprehensive ATTR education portal). Facebook ATTR support forums.

KEY INFLUENCES

HF-specialist cardiologist, geneticist, amyloidosis-centre lead, spouse.

EMOTIONAL TRIGGERS

Relief at diagnosis after wandering. Prognosis anxiety. Family concern (genetic ATTRv). Adherence + treatment cost.

PLATFORMS

amyloidosis.org, vyndaqel.com (GEO benchmark), Facebook ATTR support, [ATTR Alliance](#), Alnylam patient portal.

INFERENCE SOURCES

[Amyloidosis Foundation](#) · Pfizer Vyndaqel.com · ATTR registries

GEO FACT SHEET

Top observed queries:

"tafamidis 80 mg vs 20 mg" · "ATTR-CM diagnosis pyrophosphate scan" · "vutrisiran amvuttra cardiomyopathy" · "ATTR genetic testing family members" · "amyloidosis life expectancy treatment"

PATIENT · 3.2

The GLP-1-demanding obesity patient

Nathalie Roussel, 44, sales executive, Lille / Jessica Williams, 41, marketing director, Dallas. BMI 34, prediabetic.

PATHOLOGY / STAGE

Grade 2 obesity + prediabetes + sleep apnoea + knee osteoarthritis. Demands Wegovy/Mounjaro/Zepbound.

RESEARCH CYCLE

Massive TikTok search (#wegovy 3B+ views, #ozempic 4B+). Novo Nordisk sites (wegovy.com), Lilly (zepbound.com). Reddit r/wegovy_weightloss, r/zepbound. 'Wegovy Warriors' Facebook communities.

KEY INFLUENCES

Endocrinologist/diabetologist or GP, TikTok-influencer peer-supporter, Reddit communities.

EMOTIONAL TRIGGERS

Long-term obesity shame. Hope for quick results + scepticism about rebound. Cost anxiety (~\$1,000/month US, limited reimbursement). FOMO if a neighbour mentions it.

PLATFORMS

TikTok (#wegovy #ozempicface), Reddit r/wegovy_weightloss, wegovy.com, zepbound.com, [Obesity Action Coalition](#).

INFERENCE SOURCES

[OAC](#) · STEP/SURMOUNT clinical trial coverage · TikTok thematic analysis

GEO FACT SHEET**Top observed queries:**

"wegovy vs zepbound weight loss results" · "mounjaro side effects nausea" · "GLP-1 muscle loss prevention" · "ozempic face filler reverse" · "compounded semaglutide safe FDA"

PATIENT · 3.3**The chronic HFpEF heart-failure patient**

André Mercier, 75, retired, Reims / Charles Robinson, 78, Phoenix. Hypertension + T2D + BMI 31.

PATHOLOGY / STAGE

Heart failure with preserved ejection fraction (HFpEF), NYHA II-III, on Jardiance + Entresto.

RESEARCH CYCLE

Patient + spouse informed via cardiologist. Moderate search (intermediate digital). Heart.org (AHA), heartfailurematters.org. Jardiance, Entresto sites. Moderate patient associations.

KEY INFLUENCES

HF cardiologist, GP, spouse caregiver, home-care nurse.

EMOTIONAL TRIGGERS

Chronic fatigue, dyspnoea. Decompensation anxiety. Adherence to multiple medications. Renal concern.

PLATFORMS

heart.org (AHA), [Heart Failure Matters \(ESC\)](#), jardiance.com, entrestohcp.com (patient side), Doctissimo cardiology forums.

INFERENCE SOURCES

[Heart Failure Matters](#) · AHA · ESC HF guidelines

GEO FACT SHEET**Top observed queries:**

"jardiance heart failure preserved ejection fraction" · "entresto side effects elderly" · "diuretic when add HFpEF" · "weight monitoring heart failure daily"

HCP · 3.1**The HF-specialist cardiologist**

Dr. Vincent Rebours, 50, CHU Lille HF unit / Dr. Anita Sharma, 52, Cleveland Clinic.

PATHOLOGY / STAGE

Prescribes SGLT2i, ARNI, cardio GLP-1. Trial investigator (EMPEROR, DELIVER, FINEARTS).

RESEARCH CYCLE

AHA Sessions, ESC Congress, ACC. NEJM, Circulation, JACC, EHJ. Active on Twitter (#cardiotwitter). Webinars from BI, Novartis, AstraZeneca, Bayer.

KEY INFLUENCES

AHA/ESC KOL network, cardio manufacturer MSL, lead cardiology centre.

EMOTIONAL TRIGGERS

Implementing the 4 HF pillars, sequencing introduction, polypharmacy management.

PLATFORMS

NEJM, Circulation, JACC, ESC, AHA, ACC, UpToDate, Twitter #cardiotwitter.

INFERENCE SOURCES

Circulation · JACC · NEJM · ESC Heart Failure guidelines

GEO FACT SHEET**Top observed queries:**

"finerenone DELIVER substudy HFpEF" · "SGLT2i sequencing ARNI beta-blocker" · "GLP-1 RA heart failure outcomes STEP-HFpEF" · "tafamidis dose comparison"

HCP · 3.2

The GLP-1-prescribing endocrinologist

Dr. Sylvie Bernard, 48, Diabetology CHU Strasbourg / Dr. Robert Chen, 49, Joslin Diabetes Center.

PATHOLOGY / STAGE

Prescribes Ozempic/Wegovy/Mounjaro/Zepbound.
Diabetes + obesity.

RESEARCH CYCLE

ADA Scientific Sessions, EASD, OW Obesity Week. Diabetes Care, Lancet Diabetes Endocrinol. Webinars from Novo, Lilly. Discussion of Wegovy/Zepbound shortages.

KEY INFLUENCES

Endocrine Society, ADA KOL, OAC medical board, fellow obesity specialists.

EMOTIONAL TRIGGERS

Managing GLP-1 shortages, choice between molecules, compounded semaglutide warnings.

PLATFORMS

Diabetes Care, Lancet D&E, ADA, EASD, OAC, UpToDate, Endocrine Society.

INFERENCE SOURCES

Diabetes Care · ADA Standards of Care · OAC medical · NEJM STEP/SURMOUNT

GEO FACT SHEET

Top observed queries:

"semaglutide vs tirzepatide weight loss head-to-head SURMOUNT" · "GLP-1 muscle loss sarcopenia prevention" · "shortage wegovy alternatives" · "compounded semaglutide FDA warning"

HCP · 3.3

The GP facing Wegovy/Ozempic demand

Dr. Julien Mercier, 42, GP in group practice Nantes / Dr. Karen Hill, 45, family medicine Austin.

PATHOLOGY / STAGE

30-40 patients/day, exploding GLP-1 demand. Not trained in obesity.

RESEARCH CYCLE

Vidal, MesVaccins, CME courses. Novo Nordisk webinars. Patient pressure explodes, quickly consults Wegovy.com, Ozempic.com, OAC patient education.

KEY INFLUENCES

Lead endocrinologist, pharmacist, Novo/Lilly MSL.

EMOTIONAL TRIGGERS

Patient pressure vs molecule availability. Off-label risk. Expectation management. Specialist coordination.

PLATFORMS

Vidal, Medscape, UpToDate, ADA Standards, novonordiskpro.com, Lilly HCP.

INFERENCE SOURCES

Vidal · UpToDate primary care obesity · ADA Standards

GEO FACT SHEET

Top observed queries:

"wegovy prescription criteria BMI" · "ozempic vs wegovy difference" · "GLP-1 contraindication pancreatitis" · "GLP-1 muscle loss elderly safety"

7.4 · Neurology & rare diseases

Three patients (early Alzheimer's, relapsing-remitting MS, post-Trikafta cystic fibrosis) and three HCPs (memory-clinic neurologist, MS-specialist neurologist, CF pulmonologist). The area most discreet on social networks, but the most dependent on patient associations (NORD, CFF, NMSS).

PATIENT · 4.1

The early-stage Alzheimer's patient/caregiver

Caregiver: Christine Lefèvre, 58, daughter of patient Henri, 81 / Patricia Brown, 60, daughter of Robert, 83.

PATHOLOGY / STAGE

Early-stage Alzheimer's disease, MMSE 22-25, in evaluation for Leqembi (lecanemab) or Kisunla (donanemab).

RESEARCH CYCLE

Primary caregiver drives research. Sites alzinfo.org, alz.org (Alzheimer's Association), Lilly Kisunla, Biogen-Eisai Leqembi. Eligibility tests (amyloid PET, APOE4 status). Family decision around 18-month infusion.

KEY INFLUENCES

Memory-clinic neurologist, GP, spouse/children caregivers, local Alzheimer's Association chapter.

EMOTIONAL TRIGGERS

Fear of progression. Anxiety over financial/legal decisions. Limited hope (slowing only). Caregiver burnout.

PLATFORMS

alz.org, alzinfo.org, leqembi.com, kisunla.com, AARP, France Alzheimer.

INFERENCE SOURCES

[Alzheimer's Association](#) · [Fisher Center for Alzheimer's](#)

GEO FACT SHEET

Top observed queries:

"leqembi eligibility APOE4 risk ARIA" · "donanemab kisunla side effects ARIA-E" · "lecanemab infusion every 2 weeks vs 4" · "Alzheimer PET amyloid scan coverage Medicare"

PATIENT · 4.2

The young-adult RR-MS patient

Marie Lefort, 31, physiotherapist, Toulouse / Emily Davis, 33, nurse, Seattle.

PATHOLOGY / STAGE

Relapsing-remitting multiple sclerosis (RR-MS), 2-year diagnosis, on Ocrevus (ocrelizumab) or switching to Tysabri/Kesimpta.

RESEARCH CYCLE

Diagnosis relatively quick after MRI. Highly active communities: NMSS (nationalmssociety.org), Ligue Française SEP. Reddit [r/MultipleSclerosis](#). Instagram MS influencers (Selma Blair effect).

KEY INFLUENCES

MS-specialist neurologist, MS nurse, local NMSS chapter, Reddit/Instagram peer-supporter.

EMOTIONAL TRIGGERS

Diagnosis shock at young age. Progression anxiety. Family decision (pregnancy + DMT). Partly 'invisible illness' identity.

PLATFORMS

NMSS, Reddit [r/MultipleSclerosis](#), ocrevus.com, kesimpta.com, Instagram MS influencers, Ligue Française SEP.

INFERENCE SOURCES

[NMSS](#) · [MS Society UK](#) · [LFSEP](#)

GEO FACT SHEET**Top observed queries:**

"ocrevus vs kesimpta side effects long term" · "MS pregnancy DMT washout" · "tysabri PML risk JCV" · "new MS oral fenebrutinib BTK trial"

PATIENT · 4.3**The adult cystic fibrosis patient post-Trikafta**

Lucas Martin, 28, engineer, Lyon / Sam Wilson, 30, software engineer, Boston. F508del homozygous.

PATHOLOGY / STAGE

Cystic fibrosis F508del homozygous, on Trikafta for 4 years. Life expectancy revolutionised.

RESEARCH CYCLE

CFF (cff.org), Vertex cysticfibrosis.com — absolute reference. Reddit r/CysticFibrosis. CFF Engage portal (lead centre + trials). Discussion of future gene therapy (Editas, Vertex CRISPR).

KEY INFLUENCES

CF-centre pulmonologist, CF nurse, dietitian, CFF, Reddit peer-supporter.

EMOTIONAL TRIGGERS

Massive hope from Trikafta (FEV1 +14%). Long-term residual inflammation anxiety. Restored fertility. Hope for gene therapy.

PLATFORMS

CFF, cysticfibrosis.com (Vertex), Reddit r/CysticFibrosis, CF Trust UK.

INFERENCE SOURCES

CFF patient registry · Vertex CF portal

GEO FACT SHEET**Top observed queries:**

"trikafta long term FEV1 improvement" · "CF pregnancy on trikafta safety" · "vanzacafter next gen CFTR modulator" · "CF gene therapy CRISPR Editas timeline"

HCP · 4.1**The memory-clinic neurologist**

Dr. Anne Dupuy, 54, CMRR Salpêtrière Paris / Dr. Howard Klein, 58, UCSF Memory & Aging Center.

PATHOLOGY / STAGE

Evaluator for Leqembi/Kisunla. ARIA monitoring expertise. APOE4 testing.

RESEARCH CYCLE

AAIC (Alzheimer's Association Intl Conference), AAN. Alzheimer's & Dementia, Lancet Neurology, JAMA Neurology. Webinars from Eisai/Biogen, Lilly.

KEY INFLUENCES

AAIC KOL network, Eisai/Biogen/Lilly MSL, geriatric psychiatry fellow.

EMOTIONAL TRIGGERS

Selecting eligible patients, ARIA-E/H management, infusion coordination, family communication.

PLATFORMS

Lancet Neurology, JAMA Neurology, Alzheimer's & Dementia, AAIC, AAN, UpToDate.

INFERENCE SOURCES

Alzheimer's & Dementia · Lancet Neurology · AAIC · AAN guidelines

GEO FACT SHEET**Top observed queries:**

"lecanemab ARIA management protocol" · "donanemab amyloid clearance vs lecanemab" · "tau PET biomarker selection" · "APOE4 homozygous ARIA risk"

HCP · 4.2

The MS-specialist neurologist

Dr. Patrick Vernet, 49, CHU Rennes MS Center / Dr. Jennifer Adams, 51, Mayo Clinic MS.

PATHOLOGY / STAGE

High-level DMT prescriber (Ocrevus, Tysabri, Kesimpta, Mavenclad).

RESEARCH CYCLE

ECTRIMS, ACTRIMS, AAN. Lancet Neurology, Multiple Sclerosis Journal, Neurology. Webinars from Roche, Novartis, Biogen.

KEY INFLUENCES

ECTRIMS KOL, NMSS medical board, Roche/Novartis/Biogen MSL.

EMOTIONAL TRIGGERS

DMT switch, sequencing, MS pregnancy, BTKi pipeline (fenebrutinib, tolebrutinib).

PLATFORMS

Multiple Sclerosis Journal, Lancet Neurology, Neurology, ECTRIMS, AAN, NMSS guidelines.

INFERENCE SOURCES

Multiple Sclerosis Journal · ECTRIMS · NMSS · Lancet Neurology

GEO FACT SHEET

Top observed queries:

"ocrevus subQ vs IV equivalence" · "kesimpta vs ocrevus long term safety" · "BTKi MS fenebrutinib tolebrutinib phase 3" · "MS pregnancy washout Kesimpta"

HCP · 4.3

The CF-centre pulmonologist

Dr. Marie-Laure Petit, 51, CRCM Lyon / Dr. Anna Brennan, 53, Boston Children's CF Center.

PATHOLOGY / STAGE

Prescribes Trikafta/Kaftrio. Follows CFF registries. Vertex trial investigator.

RESEARCH CYCLE

NACFC (North American CF Conference), ECFS. Journal of Cystic Fibrosis, AJRCCM. CFF clinical guidelines.

KEY INFLUENCES

CFF medical board, NACFC KOL, Vertex MSL.

EMOTIONAL TRIGGERS

Long-term Trikafta outcomes, fertility, residual inflammation, access to next-gen modulators.

PLATFORMS

Journal of Cystic Fibrosis, AJRCCM, NACFC, ECFS, CFF, [cysticfibrosis.com](https://www.cysticfibrosis.com).

INFERENCE SOURCES

Journal of Cystic Fibrosis · CFF guidelines · NACFC · Vertex medical

GEO FACT SHEET

Top observed queries:

"vanzacaftor tezacaftor deutivacaftor pivotal" · "trikafta mental health depression suicidality" · "CF lung transplant criteria post trikafta" · "azithromycin maintenance trikafta era"

7.5 · Vaccines & infectious diseases

Two patients (60+ facing recommended vaccines, parents facing Beyfortus) and two HCPs (Beyfortus paediatrician, GP vaccinating 60+). The area most crossed by misinformation — LLMs play a critical reassurance role here.

PATIENT · 5.1

The 60+ adult facing recommended vaccines

Jacqueline Roux, 67, retired teacher, Bordeaux / Patricia Walsh, 70, Florida.

PATHOLOGY / STAGE

Vaccine targets: RSV (Arexvy/Abrysvo), shingles (Shingrix), annual flu, COVID booster.

RESEARCH CYCLE

Moderate search. CDC.gov, ameli.fr, MesVaccins.net (France). GP discussion. Concerns about side effects (Shingrix pain). Hesitation about the new RSV vaccine.

KEY INFLUENCES

GP (top authority), community pharmacist, spouse, occasionally grandchildren who are paediatricians.

EMOTIONAL TRIGGERS

GP trust = key. Anxiety about immediate effects. Residual Facebook anti-vaccine misinformation.

PLATFORMS

CDC.gov, ameli.fr, MesVaccins.net, GP, arexvy.com, shingrix.com.

INFERENCE SOURCES

CDC · HAS vaccination recommendations · MesVaccins · Pew Research vaccination

GEO FACT SHEET

Top observed queries:

"shingrix pain side effects" · "RSV vaccine Arexvy vs Abrysvo elderly" · "high-dose flu vaccine after 65" · "covid booster 2024 recommendation"

PATIENT · 5.2

Parents facing Beyfortus for their infant

Sophie & Marc Leblanc, 32 & 34, parents of Léo (3 months), Toulouse / Emma & Jake Roberts, 30 & 33, parents of Mia (4 months).

PATHOLOGY / STAGE

Baby <8 months in RSV season — eligible for Beyfortus (nirsevimab) passive immunisation.

RESEARCH CYCLE

Paediatrician = primary authority. Searches Beyfortus, ameli, CDC. Doctissimo parent forums, Magic Maman. Instagram parent influencers.

KEY INFLUENCES

Paediatrician, maternal & child health doctor (PMI), spouse, paediatrician grandmother.

EMOTIONAL TRIGGERS

Trust in paediatrician. Anxiety about new medication. Comparison with vaccine (passive immunisation vaccine).

PLATFORMS

Paediatrician, ameli, CDC RSV, beyfortus.com, Doctissimo, Magic Maman, Instagram parents.

INFERENCE SOURCES

HAS Beyfortus · CDC RSV · INPES · ameli.fr

GEO FACT SHEET

Top observed queries:

"beyfortus nirsevimab infant side effects" · "RSV bronchiolitis baby prevention 2024" · "beyfortus vs synagis difference" · "beyfortus reimbursement France"

HCP · 5.1

The paediatrician facing passive immunisations

Dr. Claire Renaud, 44, private paediatrician Lyon / Dr. Mark Stevens, 47, paediatrician Atlanta.

PATHOLOGY / STAGE

Prescribes Beyfortus during RSV season. Counsels parents on new immunisations.

RESEARCH CYCLE

AAP (American Academy of Pediatrics) Red Book, ESPID, JIM, Pediatric Infectious Disease Journal. Webinars from Sanofi-AstraZeneca. CDC/HAS recommendations.

KEY INFLUENCES

Lead CHU paediatrician, Sanofi-AZ MSL, AAP medical board.

EMOTIONAL TRIGGERS

RSV season workflow, stock management, parental counselling, parental vaccine hesitancy.

PLATFORMS

AAP Red Book, CDC, HAS, JIM, Vidal, Medscape Pediatrics.

INFERENCE SOURCES

AAP Red Book · CDC · HAS Beyfortus · Pediatrics journal

GEO FACT SHEET

Top observed queries:

"beyfortus stock pediatric clinic 2024" · "nirsevimab dosing weight" · "RSV bronchiolitis hospitalization data Beyfortus US 2023-24"

HCP · 5.2

The GP vaccinating adults 60+

Dr. Sébastien Lacroix, 50, GP Strasbourg / Dr. Linda Chen, 53, family physician Seattle.

PATHOLOGY / STAGE

Adult vaccinator: RSV, shingles, flu, COVID, pneumococcal. Mostly elderly patients.

RESEARCH CYCLE

Vidal, MesVaccins, CME courses, webinars from GSK, Pfizer, Sanofi. CDC/HAS.

KEY INFLUENCES

Vaccine manufacturer MSL, community pharmacist, vaccinating nurse.

EMOTIONAL TRIGGERS

Flu + RSV season workflow, stock management, post-COVID vaccine hesitancy.

PLATFORMS

Vidal, MesVaccins.net, CDC, HAS, Medscape, CME courses.

INFERENCE SOURCES

Vidal · HAS · CDC ACIP · MesVaccins

GEO FACT SHEET

Top observed queries:

"arexvy vs abrysvo recommendation 60+" · "shingrix local reaction management" · "high-dose flu vaccine Eflueda 65+" · "COVID booster simultaneous flu RSV"

7.6 · Ophthalmology & rare haematology

Two patients (wet AMD, sickle cell disease eligible for gene therapy) and two HCPs (retina ophthalmologist, SCD/PNH haematologist). The most segmented and least socially exposed area — but patient communities (sickle cell) become powerful with the arrival of Casgevy/Lyfgenia.

PATIENT · 6.1

The wet AMD patient

Henri Lemoine, 78, retired, Lille / Robert Walker, 81, Phoenix.

PATHOLOGY / STAGE

Exudative (wet) age-related macular degeneration, on Eylea or switching to Vabysmo / Beovu / Lucentis.

RESEARCH CYCLE

Moderate search. AMD Alliance International, association DMLA, Macular.org. Eylea, Vabysmo, Beovu sites. Discussion of intravitreal injection intervals.

KEY INFLUENCES

Retina ophthalmologist, GP, spouse, local AMD association.

EMOTIONAL TRIGGERS

Fear of vision loss. Anxiety about frequent injections. Hope for Vabysmo (interval 16 weeks). Long-term adherence.

PLATFORMS

Macular.org, AMD Alliance, eylea.com, vabysmo.com, beovu.com, ARMD France.

INFERENCE SOURCES

Macular Society · AAO · AMD Alliance · ARMD France

GEO FACT SHEET

Top observed queries:

"vabysmo vs eylea injection interval" · "wet AMD eye injection frequency" · "Beovu vasculitis risk" · "Lucentis Avastin off-label cost"

PATIENT · 6.2

The sickle cell patient eligible for gene therapy

Mariam Ndiaye, 24, student, Paris / Marcus Johnson, 27, Atlanta. Homozygous SCD.

PATHOLOGY / STAGE

Severe SS sickle cell disease (recurrent crises), eligible for Casgevy (exa-cel CRISPR Vertex) or Lyfgenia (lovo-cel bluebird).

RESEARCH CYCLE

Highly active communities: APIPD (France), SCDA (US). TikTok #sicklecell. Intense discussion of Casgevy vs Lyfgenia (long-term safety, \$2-3M cost).

KEY INFLUENCES

Lead CHU SCD haematologist, genetic counsellor, SCDA/APIPD patient community.

EMOTIONAL TRIGGERS

Massive hope (potential cure). Anxiety about myeloablative conditioning. Cost/access (US disparities). Sickle cell community identity.

PLATFORMS

SCDA, APIPD France, TikTok #sicklecell, casgevy.com (Vertex), lyfgenia (bluebird), Reddit r/sicklecell.

INFERENCE SOURCES

SCDA · APIPD · Vertex Casgevy · bluebird bio

GEO FACT SHEET

Top observed queries:

"casgevy vs lyfgenia which better" · "sickle cell gene therapy cost insurance" · "exa-cel conditioning busulfan side effects" · "casgevy long term VOC reduction"

HCP · 6.1

The retina ophthalmologist

Dr. Sophie Cantin, 51, CHU Nantes Retina service / Dr. Andrew Lee, 53, Bascom Palmer.

PATHOLOGY / STAGE

Daily intravitreal injector. Anti-VEGF switching.

RESEARCH CYCLE

AAO Annual Meeting, ARVO, EURETINA.
Ophthalmology, Retina, AJO. Webinars from Roche, Regeneron, Novartis.

KEY INFLUENCES

AAO retina KOL, Roche/Regeneron MSL, fellow investigators.

EMOTIONAL TRIGGERS

Anti-VEGF choice, treat & extend interval, Beovu vasculitis management.

PLATFORMS

Ophthalmology, Retina, AJO, AAO, ARVO, EURETINA.

INFERENCE SOURCES

Ophthalmology · Retina · AAO · ARVO · EURETINA

GEO FACT SHEET

Top observed queries:

"vabysmo faricimab pivotal TENAYA LUCERNE" · "eylea HD 8 mg pivotal PHOTON PULSAR" · "anti-VEGF switching protocol non-responders"

HCP · 6.2

The SCD/PNH haematologist

Dr. François Mbeka, 47, haematology CHU Henri Mondor Créteil / Dr. Aisha Williams, 49, Children's National DC.

PATHOLOGY / STAGE

SCD referral centre + gene therapy. Vertex/bluebird trial investigator.

RESEARCH CYCLE

ASH Annual Meeting, EHA Congress. Blood, AJH, Lancet Haematology. SCDA medical board.

KEY INFLUENCES

ASH hemoglobinopathies KOL, SCDA medical board, Vertex/bluebird MSL.

EMOTIONAL TRIGGERS

Gene therapy eligibility selection, conditioning, long-term monitoring, financing access.

PLATFORMS

Blood, AJH, Lancet Haematology, ASH, EHA, SCDA, ESH.

INFERENCE SOURCES

Blood · ASH · SCDA medical · NEJM CLIMB trials

GEO FACT SHEET

Top observed queries:

"casgevy real world VOC reduction 2 year" · "lyfgenia AML risk monitoring" · "voxelotor oxbryta withdrawal" · "crizanlizumab adakveo efficacy"

7.7 · Annex — Transversal patient + HCP queries

Synthesis of the 30 most frequent signature queries observed in the persona base — raw material for structuring a GEO-ready brand site or patient hub.

Top 15 patient queries — universal behaviour

Side effects long term: "[drug] side effects long term", "[drug] withdrawal", "[drug] safety years"

Cost / insurance: "[drug] cost without insurance", "[drug] copay assistance", "[drug] manufacturer coupon"

Comparison vs.: "[drug A] vs [drug B] which better", "[drug A] or [drug B] for [condition]"

Stop / switch: "[drug] stop suddenly", "switch from [drug A] to [drug B]"

Pregnancy: "[drug] pregnancy safe", "[drug] breastfeeding", "[drug] fertility"

Diet / lifestyle: "[condition] diet trigger", "[drug] alcohol interaction"

Reviews / experiences: "[drug] real reviews", "[drug] reddit honest experience"

Onset / efficacy: "how long [drug] to work", "[drug] week 4 results"

Eligibility: "[treatment] who is eligible", "[treatment] criteria FDA"

Natural alternatives: "[condition] natural treatment", "[drug] alternatives"

Symptoms: "[disease] early symptoms", "[disease] severity scale"

Second opinion: "[condition] second opinion", "best [specialty] doctor [city]"

Clinical trials: "[disease] clinical trial 2024", "clinical trial [disease]"

Insurance approval: "prior auth [drug]", "appeal denied [drug]"

Quality of life: "[disease] quality of life", "[disease] disability work"

Top 15 HCP queries — universal behaviour

Head-to-head: "[drug A] vs [drug B] [outcome] pivotal trial"

Subgroup analysis: "[drug] subgroup [biomarker]", "[trial] post-hoc"

Sequencing: "[drug class] sequencing order"

Long term safety: "[drug] long term safety [year] follow up"

Real world data: "[drug] real world evidence", "[drug] registry data"

Switch protocol: "switch [drug A] to [drug B] washout"

Paediatric / special pop: "[drug] pediatric dose", "[drug] elderly safety"

Drug-drug interaction: "[drug A] [drug B] interaction"

Biomarker: "[disease] biomarker [name] response"

Guideline: "[society] guideline [disease] [year]"

Adverse event mgmt: "[drug] [AE] management protocol"

Cost-effectiveness: "[drug] ICER cost effectiveness"

Combination therapy: "[drug A] + [drug B] combination [disease]"

Next-gen pipeline: "[mechanism] next gen pipeline phase 3"

Mechanism of action: "[drug] mechanism action [disease]"

THE CONSULTANT'S TAKE

Strategic read: 80% of patient queries are predictable and stable over 5 years. If your brand site doesn't contain an FAQ explicitly structured around these 15 dimensions, you leave a gap LLMs fill with Drugs.com, Reddit or WebMD. First GEO action: audit FAQ vs these 15 patterns. Second action: dedicated H2 per pattern. Third: FAQ schema.org markup.

PART 8

The consultant's take

*"A GEO audit doesn't end with a score — it ends with an agenda.
What must be done this week, this quarter, this year."*

— *The Aikka angle*

8.1 · Top 10 GEO-ready 2026

The brands that structurally performed best in the GEO/AI visibility audit. These brands concentrate the patterns to replicate: indexable disease education, structured FAQs, open patient hub, accessible clinical evidence.

#	BRAND	COMPANY	AREA	SCORE	WHY
1	Trikafta / Kaftrio	Vertex Pharmaceuticals	NEURO / RARE	8.5	Open CF disease education + co-branding cysticfibrosis.com (Vertex)
2	Dupixent	Sanofi / Regeneron	IMMUNO DERMA	8.0	Multilingual site + structured FR/US FAQ + paediatric transparency
3	Keytruda	Merck / MSD	ONCOLOGY	7.5	Indication-specific subdomains + rich HCP portal + clinicaltrials linked
4	Vyndaqel / Vyndamax	Pfizer	NEURO / RARE	7.5	vyndaqel.com benchmark ATTR-CM + indexable amyloidosis education
5	Casgevy	Vertex / CRISPR Therapeutics	OPHTHA / RARE HEMA	7.5	SCD disease overview + transparent gene therapy pathway + co-branding
6	Ozempic / Wegovy	Novo Nordisk	CARDIO METABOLIC	7.0	Separate diabetes/obesity sites + side-effects FAQ + indication transparency
7	Eliquis	Bristol Myers Squibb / Pfizer	CARDIO METABOLIC	7.0	Atrial fib MoA + DOAC comparison narrative + comparison tables
8	Legvio	Novartis	CARDIO METABOLIC	7.0	siRNA disease mechanism page + LDL targeting education
9	Ocrevus	Roche / Genentech	NEURO / RARE	7.0	Open MS DMT efficacy data + treatment timing narrative
10	Hemlibra	Roche / Genentech	NEURO / RARE	7.0	Hemophilia A education + transparent injection schedule + factor VIII mimetic MoA

BEST PRACTICE

The Vertex pattern (Trikafta + Casgevy) confirms a simple thesis: **disease-education + brand co-branding** via two distinct yet linked sites (cysticfibrosis.com on the disease side, trikafta.com on the brand side) maximises GEO surface area. Pfizer does the same with amyloidosis.com / vyndaqel.com.

8.2 · Bottom 10 GEO-fragile 2026

Brands that structurally underperform in GEO/AI visibility. Principal causes: HCP walled gardens, excessive reliance on non-indexable TV/social campaigns, very thin brand sites (PI focus only), absence of contextualising disease education.

#	BRAND	COMPANY	AREA	SCORE	GEO-FRAGILE REASON
1	Stelara	Johnson & Johnson	IMMUNO DERMA	4.5	Mature pipeline — content captured by biosimilars, J&J; pushes Tremfya
2	Sotyktu	Bristol Myers Squibb	IMMUNO DERMA	4.5	Very thin branded site, under-developed FAQ vs IL-17/IL-23 competitors
3	Voranigo	Servier	ONCOLOGY	4.5	Recent launch, content still purely clinical, little contextualised patient education
4	Tremfya	Johnson & Johnson	IMMUNO DERMA	5.0	TremfyaWithMe hub excellent but thin brand site, weak FAQ vs Skyrizi
5	Verzenio	Eli Lilly	ONCOLOGY	5.0	Limited brand site on CDK4/6, no open comparison vs Kisqali/Ibrance
6	Enhertu	AstraZeneca / Daiichi-Sankyo	ONCOLOGY	5.0	Thin HER2-low brand storytelling, ASCO-driven but limited owned anchoring
7	Tagrisso	AstraZeneca	ONCOLOGY	5.0	Weak EGFR education site, content replaced by lung cancer associations
8	Shingrix	GSK	VACCINES	5.5	Very basic vaccine site, missing Shingrix pain FAQ (top patient query)
9	Farxiga / Forxiga	AstraZeneca	CARDIO METABOLIC	5.5	Jardiance cannibalisation + UK walled HCP + thin brand site on HFpEF
10	Cosentyx	Novartis	IMMUNO DERMA	5.5	Psoriasis/PsA pivot, but thin content on long-term safety — cumulative IL-17

WATCH OUT

The dominant Bottom-10 pattern: **oncology + immuno-derma** for recent molecules. These brands rely on ASCO/EADV for HCP coverage and on TV campaigns for patient coverage — two channels invisible to LLMs. The brand site remains minimal (PI focus), the HCP hub is walled, the patient hub is non-existent or very thin.

8.3 · 10 quick wins actionable within 90 days

GEO actions directly implementable — without rewriting the site, without changing CMS, without lengthy medical approval. Immediate ROI is measurable on Perplexity, ChatGPT and Google AI Overviews within 60–90 days of going live.

QW01 — FAQ schema.org. Mark existing FAQs in JSON-LD FAQPage. Effect: LLMs explicitly identify the Q/A structure. Technical cost: 4–8h dev. GEO impact: immediate on Perplexity and AI Overviews.

QW02 — H2 per persona query. For each top-15 persona query, verify a literal H2 corresponds. If not, add it. Effect: exhaustive lexical coverage on predictable patterns.

QW03 — Partially open HCP hubs. At minimum, make disease education openly accessible (no login). Reserve SmPC and dosing guides for login. Effect: doubles indexable surface area without regulatory risk.

QW04 — Copy-paste HCP FAQ into patient. The HCP FAQ exists and is medically reviewed. Create a plain-language patient version + glossary. Effect: dual-audience coverage at marginal cost.

QW05 — Open comparison tables. Comparison tables (dose, AE, indication) are the best candidates for LLM extraction. Structure them in HTML with explicit headers. Effect: massive on 'vs' queries.

QW06 — Indication-specific pages by sub-population. Beyond the FDA indication, create pages per sub-population (paediatric, geriatric, biomarker, line of therapy). Effect: medical long-tail coverage.

QW07 — Full video transcripts. All brand videos (DTC, testimonials, MoA) must have an accessible HTML transcript. Effect: LLMs read text, not video. Near-zero cost.

QW08 — Fragmented sitemap.xml. If the site exceeds 500 URLs, fragment the sitemap by section. Effect: better LLM crawl, better Perplexity citation sampling.

QW09 — Accessible real-world data. If a registry / RWE / observational study exists, publish a public summary (1–2 pages). Effect: increases trust for HCP-type 'real world' queries.

QW10 — Visible reference physician. At least one 'medical review by' page with photo + credentials of the MD reviewer. Effect: powerful EEAT signal for Google AI Overviews and Perplexity sourcing.

IN PLAIN ENGLISH

These 10 actions do not require reorganisation. They fit in a standard product sprint. **If a brand puts these 10 quick wins in place ahead of its competitors, it builds a structural GEO lead of 6–12 months.**

8.4 · GEO roadmap — 3 ambition levels

Three pragmatic trajectories by brand maturity. Level 1 = essential foundations. Level 2 = structured surface-area build. Level 3 = category GEO leadership.

LEVEL 1 — FOUNDATIONS (0-3 months)

Full 5-dimension GEO audit · Implement the 10 quick wins · FAQ schema.org across 100% of the site · Video transcripts · Open HCP-side disease education · Visible medical review · Baseline KPI: Perplexity citations + AI Overviews coverage.

LEVEL 2 — CONSTRUCTION (3-9 months)

Launch or rebuild a non-brand disease education hub (style amyloidosis.com, cysticfibrosis.com) · Structure an open brand-side patient hub (style TremfyaWithMe) · Quarterly pipeline of open FAQs (20 FAQs/quarter) · Open comparison tables (dose, AE, mechanism) · Real-world data summary · Filmed patient cases with full transcripts · Comprehensive medical glossary.

LEVEL 3 — LEADERSHIP (9-18 months)

THE CONSULTANT'S TAKE

My field read: 80% of pharma brands sit at level 0 (no formalised GEO audit). 15% at level 1 (partial quick wins). 4% at level 2 (open disease education hub). 1% at level 3 (Vertex, Pfizer ATTR, Sanofi-Regeneron Dupixent). The competitive window to move to level 2 closes in 2026-2027.

8.5 · 5 structural shifts to anticipate

Macro trends redrawing pharma omnichannel 2026-2028. These shifts are already underway: they are not optional, they are the agenda.

SHIFT 1 — From SEO to GEO. Google clicks decline (Pew Research, 2026: 22% of Americans use ChatGPT for health). Brands without a formalised GEO strategy lose 30-50% of their organic conversion surface within 18 months. **Action:** migrate the SEO budget toward GEO by 2027.

SHIFT 2 — From walled garden to open hub. Login-restricted HCP hubs become invisible. Brands that open disease education (keeping SmPC/dosing behind login) double their GEO surface area. **Action:** separate disease education (open) from prescriptive content (login).

SHIFT 3 — From DTC TV to omnichannel patient hub. TV remains useful for awareness but is invisible to LLMs. The open patient hub (style TremfyaWithMe, alzinfo.org) becomes the converting top of the funnel. **Action:** invest 20-30% of DTC budget in an omnichannel patient hub.

SHIFT 4 — From closed symposium to HCP content engine. The ESMO/AHA satellite symposium reaches 3-5K HCPs, is ROI-measured, but leaves no LLM trace. Brands that transform their symposia assets into an open HCP content engine (slides + transcripts + Q&A;) dominate. **Action:** open scientific post-content.

SHIFT 5 — From award-winning campaign to omnichannel coherence. Cannes Lions Health rewards the idea. But the idea alone is no longer enough — it is coherence across TV + site + social + patient hub + HCP portal that determines GEO conversion. **Action:** move from siloed creative to persona-led omnichannel systemics.

BEST PRACTICE

The ultimate 2026 test: ask Perplexity or ChatGPT 'What are the best treatments for [your indication] and why?'. If your brand is not in the top 3 citations, you are becoming invisible to 22-32% of your target audience. The window is 12-18 months.

PART 9

Annexes

9.1 · Glossary — 35 essential GEO/Pharma terms

AEO — Answer Engine Optimization. Optimisation for answer engines (Perplexity, ChatGPT). Sub-discipline of GEO.

AI Overviews — AI-generated summaries placed at the top of Google results. Globally launched 2024. Capture 30-50% of traditional SEO clicks.

Anti-pattern — Behaviour, structure or choice that degrades GEO/SEO performance. Cataloguing APs is as useful as cataloguing BPs.

ATTR-CM — Transthyretin amyloid cardiomyopathy. Indication for Vyndaqel (tafamidis, Pfizer).

Biosimilar — Biomedicine highly similar to an originator biologic after patent expiry. Concerns Humira (multiple) and Stelara from 2025.

CAR-T — Chimeric Antigen Receptor T-cell therapy. Cell therapy (Yescarta, Kymriah, Breyanzi, Carvykti, Abecma).

Cannes Lions Health — International health marketing festival. Annual reference for pharma creative awards.

DTC — Direct-to-Consumer. Brand communication directly to patients. Legal in US, restricted in EU.

EEAT — Expertise, Experience, Authoritativeness, Trustworthiness. Google criteria for ranking a health site. Critical for YMYL.

ESMO / ASCO / AHA — Major international congresses (EU oncology, US oncology, cardiology). Primary KOL venue.

FAQ Schema — JSON-LD FAQPage markup enabling engines to identify structured Q/A. Crucial for GEO.

GEO — Generative Engine Optimization. Optimising content to be cited by LLMs (ChatGPT, Perplexity, Claude, Gemini).

GLP-1 — Glucagon-Like Peptide 1. Class of Wegovy/Ozempic (semaglutide), Mounjaro/Zepbound (tirzepatide).

HFpEF — Heart Failure with preserved Ejection Fraction. Indication for SGLT2i Jardiance, Farxiga.

Patient hub — Brand-aligned website dedicated to patient education. E.g. TremfyaWithMe, alzinfo.org, mycareroadmap.com.

IL-17 / IL-23 — Interleukins targeted by dermatology/rheumatology biologics. IL-17: Cosentyx, Taltz. IL-23: Skyrizi, Tremfya, Ilumya.

- KOL** — Key Opinion Leader. Reference physician in a specialty — often a clinical trial investigator.
- LLM** — Large Language Model. ChatGPT, Claude, Gemini, Perplexity, Mistral. Engines of AI search.
- MedComms** — Medical Communications. Agencies specialised in HCP scientific communication (Envision, Ashfield, Caudex).
- IBD** — Inflammatory Bowel Diseases (Crohn's, UC). Indication for anti-TNF, IL-23, JAK.
- MoA** — Mechanism of Action. Molecular mechanism of action of a drug.
- MSL** — Medical Science Liaison. Field-based scientific representative of a manufacturer — KOL/lab interface.
- NSCLC** — Non-Small Cell Lung Cancer. 85% of lung cancers. Indication for Keytruda, Tagrisso, Opdivo.
- OPDP / ANSM** — Office of Prescription Drug Promotion (FDA US) / French National Agency for Medicines Safety. DTC regulators.
- PASI / DLQI / POEM** — Clinical scores for psoriasis (PASI), skin quality of life (DLQI), eczema (POEM). Key PRO endpoints.
- PFDD** — Patient-Focused Drug Development. FDA programme of patient listening. Rich source for persona inference.
- PI / SmPC** — Prescribing Information (US) / Summary of Product Characteristics (EU). Official reference document for a drug.
- Pillar page** — Dense site hub page, structured to cover a topic exhaustively. SEO and GEO optimum.
- PRO** — Patient Reported Outcomes. Subjective measures reported by the patient (quality of life, pain, etc.).
- PWA** — Progressive Web App. Front-end architecture rendering a site non-indexable if rendered client-side only. GEO anti-pattern.
- Tumour board** — Multidisciplinary tumour board (France: RCP). Venue for therapeutic decisions in oncology.
- RWE / RWD** — Real-World Evidence / Real-World Data. Real-life data outside trials. Premium GEO argument for HCPs.
- SEO** — Search Engine Optimization. Classical discipline of search engine optimisation (Google, Bing).
- Sitemap.xml** — File listing a site's URLs, read by crawlers (Google, GPTBot, PerplexityBot).
- GEO surface area** — Volume of indexable and structured content of a brand. The wider the surface area, the higher the probability of being cited.
- Walled garden** — HCP site/hub reserved for login, therefore invisible to LLMs. Major GEO anti-pattern.
- YMYL** — Your Money Your Life. Google category for health/finance subject to reinforced EEAT standards.

9.2 · Index of 40 brands (A–Z)

Beyfortus · Sanofi / AstraZeneca · *Infant RSV prevention (seasonal monoclonal antibody)* ·

<https://www.beyfortus.com>

Biktarvy · Gilead Sciences · *HIV — Single Tablet Regimen*

· <https://www.biktarvy.com>

Bimzelx · UCB · *PsO, PsA, AxSpA, HS (anti-IL-17A/F)* ·

<https://www.bimzelx.com>

Carvykti · Johnson & Johnson / Legend · *R/R multiple myeloma (CAR-T BCMA)* · <https://www.carvykti.com>

Casgevy · Vertex / CRISPR Therapeutics · *Sickle cell disease / α -thalassemia (CRISPR editing)* ·

<https://www.casgevy.com>

Comirnaty · Pfizer / BioNTech · *COVID-19* ·

<https://www.cdc.gov/vaccines/covid-19/>

Cosentyx · Novartis · *7 indications — PsO, PsA, AS, AxSpA, HS, ERA, uveitis* · <https://www.cosentyx.com>

Darzalex · Johnson & Johnson · *Multiple myeloma (anti-CD38)* · <https://www.darzalex.com>

Dupixent · Sanofi / Regeneron · *9 indications — AD, asthma, EoE, COPD, CRSwNP, prurigo, urticaria* ·

<https://www.dupixent.com>

Eliquis · Bristol Myers Squibb / Pfizer · *Non-valvular AF, DVT/PE, post-surgical prophylaxis (DOAC)* ·

<https://www.eliquis.com>

Enhertu · AstraZeneca / Daiichi-Sankyo · *HER2-low/HER2+ breast, gastric, NSCLC (ADC)* ·

<https://www.enhertu.com>

Lynparza · AstraZeneca / Merck · *BRCA+ cancers (PARP) — ovarian, breast, prostate, pancreatic* ·

<https://www.lynparza.com>

Mounjaro / Zepbound · Eli Lilly · *T2D (Mounjaro) / Obesity (Zepbound) / OSA (Zepbound)* ·

<https://www.mounjaro.com>

Ocrevus · Roche / Genentech · *Relapsing MS, active secondary MS, primary progressive MS (anti-CD20)* ·

<https://www.ocrevus.com>

Opdivo · Bristol Myers Squibb · *Immuno-oncology (anti-PD-1) — multi-indication* · <https://www.opdivo.com>

Ozempic / Wegovy · Novo Nordisk · *T2D (Ozempic) / Obesity (Wegovy) / oral (Rybelsus)* ·

<https://www.ozempic.com>

Rinvoq · AbbVie · *9 immunology indications (JAK1) — AD, RA, AxSpA, PsA, UC, Crohn's, JIA...* ·

<https://www.rinvoq.com>

Shingrix · GSK · *Shingles prevention in adults aged 50+* ·

<https://www.shingrix.com>

Skyrizi · AbbVie · *Psoriasis, PsA, Crohn's, UC (anti-IL-23)* ·

<https://www.skyrizi.com>

Soliris / Ultomiris · AstraZeneca / Alexion · *PNH, atypical HUS, MG, NMOSD (anti-C5)* · <https://www.ultomiris.com>

Sotyktu · Bristol Myers Squibb · *Plaque psoriasis (TYK2)* ·

<https://www.sotyktu.com>

Spravato · Johnson & Johnson · *Treatment-resistant depression (TRD), intranasal* · <https://www.spravato.com>

Entresto · Novartis · *Heart failure (ARNI)* · <https://www.entresto.com>

Eylea / Eylea HD · Regeneron / Bayer · *AMD, DME, RVO (anti-VEGF)* · <https://www.eylea.us>

Farxiga / Forxiga · AstraZeneca · *T2D, HF, CKD (SGLT2)* · <https://www.farxiga.com>

Hemlibra · Roche / Genentech · *Hemophilia A with/without inhibitors (bispecific)* · <https://www.hemlibra.com>

Humira · AbbVie · *11 anti-TNF indications — legacy (post-LOE biosimilars)* · <https://www.humira.com>

Imbruvica · Johnson & Johnson / AbbVie · *CLL, WM, chronic GVHD (BTK)* · <https://www.imbruvica.com>

Jardiance · Boehringer Ingelheim / Lilly · *T2D, HF (HFrEF/HFpEF), CKD (SGLT2)* · <https://www.jardiance.com>

Keytruda · Merck / MSD · *Immuno-oncology — 44 FDA indications across 19 cancers* · <https://www.keytruda.com>

Leqembi · Eisai / Biogen · *Early Alzheimer's disease (anti-A)* · <https://www.leqembi.com>

Leqvio · Novartis · *Hypercholesterolemia (siRNA PCSK9) — 2 injections/year* · <https://www.leqvio.com>

Stelara · Johnson & Johnson · *PsO, PsA, Crohn's, UC (anti-IL-12/23) — post-LOE biosimilars* · <https://www.stelarainfo.com>

Tagrisso · AstraZeneca · *EGFR-mutated NSCLC (3rd-generation TKI)* · <https://www.tagrisso.com>

Tremfya · Johnson & Johnson · *PsO, PsA, UC, Crohn's (anti-IL-23p19)* · <https://www.tremfya.com>

Trikafta / Kaftrio · Vertex Pharmaceuticals · *Cystic fibrosis (90% of patients)* · <https://www.trikafta.com>

Vabysmo · Roche / Genentech · *AMD, DME, RVO (bispecific anti-VEGF + anti-Ang-2)* · <https://www.vabysmo.com>

Verzenio · Eli Lilly · *HR+/HER2- breast cancer (CDK4/6) — EBC and MBC* · <https://www.verzenio.com>

Voranigo · Servier · *IDH-mutated grade 2 glioma (low-grade)* · <https://www.voranigo.com>

Vyndaqel / Vyndamax · Pfizer · *ATTR-CM (transthyretin amyloid cardiomyopathy)* · <https://www.pfizerforall.com/attr-cm/>

Vyvgart · argenx · *Autoimmune myasthenia gravis (anti-FcRn) — Hytrulo SC* · <https://www.vyvgart.com>

9.3 · Manufacturer index (A–Z)

AbbVie	Humira, Rinvoq, Skyrizi
AstraZeneca	Farxiga / Forxiga, Tagrisso
AstraZeneca / Alexion	Soliris / Ultomiris
AstraZeneca / Daiichi-Sankyo	Enhertu
AstraZeneca / Merck	Lynparza
Boehringer Ingelheim / Lilly	Jardiance
Bristol Myers Squibb	Opdivo, Sotyktu
Bristol Myers Squibb / Pfizer	Eliquis
Eisai / Biogen	Leqembi
Eli Lilly	Mounjaro / Zepbound, Verzenio
GSK	Shingrix
Gilead Sciences	Biktarvy
Johnson & Johnson	Darzalex, Spravato, Stelara, Tremfya
Johnson & Johnson / AbbVie	Imbruvica
Johnson & Johnson / Legend	Carvykti
Merck / MSD	Keytruda
Novartis	Cosentyx, Entresto, Leqvio
Novo Nordisk	Ozempic / Wegovy
Pfizer	Vyndaqel / Vyndamax
Pfizer / BioNTech	Comirnaty
Regeneron / Bayer	Eylea / Eylea HD
Roche / Genentech	Hemlibra, Ocrevus, Vabysmo
Sanofi / AstraZeneca	Beyfortus
Sanofi / Regeneron	Dupixent
Servier	Voranigo
UCB	Bimzelx
Vertex / CRISPR Therapeutics	Casgevy
Vertex Pharmaceuticals	Trikafta / Kaftrio

argenx

Vyvgart

9.4 · Primary references

Main external sources mobilised across the guide. Clickable links.

Macro studies on AI in health

- AMA — 66% of US physicians use AI (2025) — <https://www.ama-assn.org/practice-management/digital-health/2-3-physicians-are-using-health-ai-78-2023>
- Pew Research — 22% of Americans use AI chatbots for health (2026) — <https://www.pewresearch.org/science/2026/04/07/users-of-social-media-and-ai-chatbots-for-health-information-are-more-likely-to-say-they-are-convenient-than-accurate/>
- Bain & Company — Generative AI in Healthcare (2024) — <https://www.bain.com/insights/healthcare-generative-ai-survey-key-findings-2024/>
- McKinsey — The state of AI in 2024 — <https://www.mckinsey.com/capabilities/quantumblack/our-insights/the-state-of-ai>

Pharma campaign awards

- Cannes Lions Health & Wellness 2024-2025 — <https://www.canneslions.com/awards/lions-health>
- PM360 Trailblazer Awards — <https://www.pm360online.com/awards/trailblazer-awards/>
- MM+M Awards — <https://www.mmm-online.com/awards/>
- Fierce Pharma Marketing Awards — <https://www.fiercepharma.com/marketing/2024-fierce-pharma-marketing-awards>
- Clio Health Awards — <https://clios.com/health>

Patient and HCP sources

- FDA Patient-Focused Drug Development (PFDD) — <https://www.fda.gov/industry/prescription-drug-user-fee-amendments/fda-patient-focused-drug-development-public-meetings>
- IQVIA Patient Journey & HCP insights — <https://www.iqvia.com/solutions/commercialization/commercial-analytics/omnichannel-engagement-and-insights/patient-insights-for-hcp-engagement/dynamic-hcp-profiling-and-targeting>
- UpToDate (HCP reference) — <https://www.uptodate.com/>
- ClinicalTrials.gov — <https://clinicaltrials.gov/>
- PubMed (NCBI) — <https://pubmed.ncbi.nlm.nih.gov/>

Principal patient associations

- NEA — National Eczema Association — <https://nationaleczema.org>
- NPF — National Psoriasis Foundation — <https://www.psoriasis.org>
- CCFA — Crohn's & Colitis Foundation — <https://www.crohnscolitisfoundation.org>
- NORD — Rare Diseases (US) — <https://rarediseases.org>
- CFF — Cystic Fibrosis Foundation — <https://www.cff.org>
- EURORDIS — Rare Diseases Europe — <https://www.eurordis.org>
- NMSS — National MS Society — <https://www.nationalmssociety.org/>
- SCDA — Sickle Cell Disease Association — <https://www.sicklecelldisease.org/>
- LLS — Leukemia & Lymphoma Society — <https://www.lls.org/>
- Alzheimer's Association — <https://www.alz.org>

IN PLAIN ENGLISH

The Omnichannel Pharma Guide · May 2026 Edition · Built by Thomas Douglas (Aikka / PharmaGEO) with the support of Perplexity Computer. **Living document** — version 2 coming Q4 2026 with the addition of 20 additional EU brands and 10 additional personas (geriatrics, paediatrics, caregivers). Contact: thomas.douglas@aikka.ai.