

Four markets in, one recommendation out

run 26 Aug 2026 18:28 UTC ai mode: max llm calls: 63 · €0.16 ▾ runtime 31.12s

eval 28/28 extraction: 74 det / 0 ai / 0 manual / 0 unresolved

Recommendation: enter the Netherlands first. Break-even in Year 3, cash trough €1.30M, five-year end cash €9.63M. The only market of the four that does not exhaust the €4.0M runway. Each 100 patients triaged saves the Dutch system €7,750.

#1 · audit · Portugal.participation

openai · gpt-5-mini · 454 tokens · answered

#2 · audit · Portugal.eligible_population

openai · gpt-5-mini · 909 tokens · answered

#3 · audit · Portugal.price_per_test

openai · gpt-5-mini · 1363 tokens · answered

#4 · audit · Portugal.colonoscopy_tariff

openai · gpt-5-mini · 1859 tokens · answered

#5 · audit · Portugal.fit_positivity

openai · gpt-5-mini · 2313 tokens · answered

#6 · audit · Germany.participation

openai · gpt-5-mini · 2809 tokens · answered

#7 · audit · Netherlands.eligible_population

openai · gpt-5-mini · 1367 tokens · answered

#8 · audit · Germany.colonoscopy_tariff

openai · gpt-5-mini · 2294 tokens · answered

#9 · audit · Netherlands.participation

openai · gpt-5-mini · 1761 tokens · answered

#10 · audit · Germany.price_per_test

openai · gpt-5-mini · 3956 tokens · answered

#11 · audit · Netherlands.fit_positivity

openai · gpt-5-mini · 2091 tokens · answered

#12 · audit · Germany.time_to_reimbursement_months

openai · gpt-5-mini · 4497 tokens · answered

#13 · audit · Netherlands.time_to_reimbursement_months

openai · gpt-5-mini · 2169 tokens · answered

#14 · audit · Netherlands.price_per_test

openai · gpt-5-mini · 3054 tokens · answered

#15 · audit · Poland.eligible_population

openai · gpt-5-mini · 2642 tokens · answered

#16 · audit · Poland.fit_positivity

openai · gpt-5-mini · 2189 tokens · answered

#17 · audit · Poland.participation

openai · gpt-5-mini · 3113 tokens · answered

#18 · audit · Poland.price_per_test

openai · gpt-5-mini · 2552 tokens · answered

[illegible]

openaippp:5apth:5-76077627tokensanswered
#2: addrauthbeaneandyearcost
 #1n#49it:5gth:5-76085439tokensanswered
 openaippp:5apth:5-76067606tokensanswered
#3: addrauthbeaneandyearcost
 #2n#49it:5gth:5-76055439tokensanswered
 openaippp:5apth:5-64386439tokensanswered
#4: addrauthbeaneandyearcost
 #3n#49it:5gth:5-76045439tokensanswered
 openaippp:5apth:5-69598959tokensanswered
#5: addrauthbeaneandyearcost
 #4n#49it:5gth:5-76035439tokensanswered
 openaippp:5apth:5-76067606tokensanswered
#6: addrauthbeaneandyearcost
 #5n#49it:5gth:5-76025439tokensanswered
 openaippp:5apth:5-77007700tokensanswered
#7: addrauthbeaneandyearcost
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 openaippp:5apth:5-76097609tokensanswered
#8: addrauthbeaneandyearcost
 #7n#49it:5gth:5-76005439tokensanswered
 openaippp:5apth:5-50485048tokensanswered
#9: addrauthbeaneandyearcost
 #8n#49it:5gth:5-76005439tokensanswered
 openaippp:5apth:5-49624962tokensanswered
#10: addrauthbeaneandyearcost
 #9n#49it:5gth:5-76005439tokensanswered
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#11: addrauthbeaneandyearcost
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#15: addrauthbeaneandyearcost
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#16: addrauthbeaneandyearcost
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#19: addrauthbeaneandyearcost
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#60: addrauthbeaneandyearcost
 #59n#49it:5gth:5-76005439tokensanswered
 openaippp:5apth:5-20142014tokensanswered
#61: addrauthbeaneandyearcost
 #60n#49it:5gth:5-76005439tokensanswered
 openaippp:5apth:5-65616561tokensanswered
#62: addrauthbeaneandyearcost
 #61n#49it:5gth:5-76005439tokensanswered
 openaippp:5apth:5-66043604tokensanswered
#63: addrauthbeaneandyearcost

openapi:5gpt5-36703670 tokens answered
#62-#62 funding_independent_rate

openapi:5gpt5-25782578 tokens answered

#63-#63 it add in petition to years earnings based

openapi:5gpt5-36703670 tokens answered

1•Ingestion: every file, its fate



1_Company_Briefing.pdf

PDF • 328ms • sha 68aeddf8



2_Market_Landscape.pdf

PDF • 543ms • sha 3458005e



4_Funding_Call.pdf

PDF • 106ms • sha c93d4464



6_Competitor_Brief_OncoStream.pdf

PDF • 134ms • sha acb9e7b1



3a_Facilities_Portugal.csv

CSV • 3ms • sha d4344ba8



5a_Screening_Report_Portugal.pdf

PDF • 59ms • sha 55f5291e



3b_Facilities_Germany.xlsx

XLSX • 90ms • sha fd06f71



5b_Screening_Report_Germany.pdf

PDF • 76ms • sha 3079b24e



3c_Facilities_Netherlands.html

HTML • 92ms • sha 8917d4ac



5c_Screening_Report_Netherlands.html

HTML • 21ms • sha fde335a6



3d_Facilities_Poland.csv

CSV • 3ms • sha 48ced7ba



5d_Screening_Report_Poland.xlsx

XLSX • 6ms • sha 38e4fa80



3e_Master_Registry.csv

CSV • 2ms • sha 3ade7285

2-3 Canonical dataset (method-badged)

PARAMETER	PORTUGAL	GERMANY	NETHERLANDS	POLAND
Eligible population 50-74	3,050,000 DET · P1	26,400,000 DET · P1	4,950,000 DET · P1	11,200,000 DET · P1
Participation	43.0% DET · P1	22.0% DET · P1	71.0% DET · P1	17.0% DET · P1
FIT positivity	6.2% DET · P1	6.0% DET · P1	9.1% DET · P1	6.5% DET · P1
Annual screened	655,750 DERIVED	2,904,000 DERIVED	1,757,250 DERIVED	952,000 DERIVED
Addressable FIT+ / yr	40,656 DERIVED	174,240 DERIVED	159,910 DERIVED	61,880 DERIVED
Price per test	€155 DET · P1	€235 DET · P1	€215 DET · P1	€115 DET · P2
Months to reimbursement	12 DET · P1	24 DET · P2	12 DET · P1	12 DET · P3
Colonoscopy tariff	€400 DET · P1	€700 DET · P1	€650 DET · P1	€300 DET · P1
One-time entry cost	€120,000 DET · table	€450,000 DET · table	€200,000 DET · table	€150,000 DET · table
In-market cost / yr	€250,000 DET · table	€600,000 DET · table	€350,000 DET · table	€300,000 DET · table

A star on a pattern id (P1*) means the value came from a document whose text was hand-corrected in the file editor; the file on disk is untouched and the correction is listed in edits.yaml.

Precedence: national screening report → landscape table → other. Full provenance per value in markets.csv; manual corrections belong in overrides.yaml, never in outputs.

4 • Facilities: one row per real unit

3,236

raw register records

228

real facilities

126

monthly rows ×12

6

corrupted rows handled

208

type conflicts (majority vote)

226

capacity conflicts (median + range)

UID	FACILITY	COUNTRY	TYPE (VOTES)	CAPACITY/ YR [RANGE]	# RECORDS
HLX-GE-001	Charite Universitaetsmedizin · Unit 1	Germany	Endoscopy (Endoscopy:13/ Pathology:4)	3800 [1500– 5200]	17
HLX-GE-002	Charite Universitaetsmedizin · Unit 2	Germany	Endoscopy (Endoscopy:18/ Pathology:4)	2900 [850– 4100]	22
HLX-GE-003	Charite Universitaetsmedizin · Unit 3	Germany	Endoscopy (Endoscopy:28/ Pathology:9)	2900 [850– 5200]	37
HLX-GE-004	Charite Universitaetsmedizin · Unit 4	Germany	Endoscopy (Endoscopy:18/ Pathology:5)	3500 [850– 5200]	23
HLX-GE-005		Germany		2900 [850– 4100]	13

UID	FACILITY	COUNTRY	TYPE (VOTES)	CAPACITY/ YR [RANGE]	# RECORDS
	Charite Universitaetsmedizin Unit 5		Endoscopy (Endoscopy:10/ Pathology:3)		
HLX- GE-006	Charite Universitaetsmedizin Unit 6	Germany	Endoscopy (Endoscopy:18/ Pathology:2)	3204 [852– 5200]	20

The rule: repair unambiguous column-shifts, else exclude (6 handled) → normalise (diacritics; Germany's 126 monthly capacities ×12; ENDO/PATH/'Endoscopy Unit' → one label) → entity = (country, canonical institution, unit n°); register ids are untrusted → master-registry names mapped via a curated, fuzzy-seeded alias table; national register is authoritative → type by majority vote, capacity as median of non-null values with min-max spread reported. Disagreements are surfaced, never silently resolved.

5 • Source agreement

SCOPE	PARAMETER	VERDICT	SOURCES
Germany	colonoscopy_tariff	AGREE	screening_report: 700 · market_landscape: 700
Germany	eligible_population	AGREE	screening_report: 26400000 · market_landscape: 26400000
Germany	fit_positivity	AGREE	screening_report: 0.06 · market_landscape: 0.06
Germany	participation	AGREE	screening_report: 0.22 · market_landscape: 0.22
Germany	price_per_test	AGREE	screening_report: 235 · market_landscape: 235
Germany	time_to_reimbursement_months	AGREE	screening_report: 24 · market_landscape: 24
Netherlands	colonoscopy_tariff	AGREE	screening_report: 650 · market_landscape: 650
Netherlands	eligible_population	AGREE	screening_report: 4950000 · market_landscape: 4950000
Netherlands	fit_positivity	AGREE	screening_report: 0.091 · market_landscape: 0.091
Netherlands	participation	AGREE	screening_report: 0.71 · market_landscape: 0.71
Netherlands	price_per_test	AGREE	screening_report: 215 · market_landscape: 215
Netherlands	time_to_reimbursement_months	AGREE	screening_report: 12 · market_landscape: 12
Poland	colonoscopy_tariff	AGREE	screening_report: 300 · market_landscape: 300
Poland	eligible_population	AGREE	screening_report: 11200000 · market_landscape: 11200000
Poland	fit_positivity	AGREE	screening_report: 0.065 · market_landscape: 0.065
Poland	participation	AGREE	screening_report: 0.17 · market_landscape: 0.17
Poland	price_per_test	AGREE	screening_report: 115 · market_landscape: 115

SCOPE	PARAMETER	VERDICT	SOURCES
Poland	time_to_reimbursement_months	AGREE	screening_report: 12 · market_landscape: 12
Portugal	colonoscopy_tariff	AGREE	screening_report: 400 · market_landscape: 400
Portugal	eligible_population	AGREE	screening_report: 3050000 · market_landscape: 3050000
Portugal	fit_positivity	AGREE	screening_report: 0.062 · market_landscape: 0.062
Portugal	participation	AGREE	screening_report: 0.43 · market_landscape: 0.43
Portugal	price_per_test	AGREE	screening_report: 155 · market_landscape: 155
Portugal	time_to_reimbursement_months	AGREE	screening_report: 12 · market_landscape: 12

6 • Validation findings

PASS CHK-01 Landscape vs national report agreement

24 multi-source parameters compared; 0 disagreement(s)

FAIL CHK-02 Competitor volume vs addressable market **handled**

OncoStream claims 300,000 tests/yr but Germany's entire organised addressable volume is 174,240/yr (1.7x the whole market). Company-reported figure REJECTED for modelling; the independent 35-40% share estimate (~61-70k tests/yr) is retained instead.

handled: the company-reported figure is excluded from the model; the independent share estimate is used

A vendor cannot process more triage tests than the entire organised addressable volume. Company-reported figures must be checked against primary screening statistics.

WARN CHK-03 Competitor claim vs its own analyst share estimate **handled**

fails for Germany

handled: same figure as CHK-02, excluded from the model

The 300k claim should also be consistent with the 35-40% independent share estimate quoted in the same brief.

PASS CHK-04 Rates are valid fractions

0 out-of-range value(s)

PASS CHK-05 Deferral rate consistent with sensitivity/specificity

holds for company

PASS CHK-06 Facility capacity plausibility

126 monthly rows annualised x12; 0 endoscopy unit(s) without resolvable capacity

PASS CHK-07 Screened volume arithmetic

holds for Portugal, Germany, Netherlands, Poland

INFO CHK-08 Colonoscopy demand vs national endoscopy capacity

Portugal: 40,656 referrals vs 165,425 register capacity (25% utilisation) | Germany: 174,240 referrals vs 156,433 register capacity (111% utilisation) | Netherlands: 159,910 referrals vs 155,800 register capacity (103% utilisation) | Poland: 61,880 referrals vs 145,125 register capacity (43% utilisation)

FIT-positive referrals compared with deduplicated national endoscopy capacity - a utilisation, not an error, check.

PASS **CHK-09** Absolute values inside plausible ranges

0 out-of-range value(s)

Evidence gaps, and the research workflow (deliberately off)

GAP-01 · Germany · opportunistic testing volume

Research this

Explicitly not centrally reported; excluded from the base case per the national report. *Upside only - could enlarge German addressable volume.*

Research plan (what the sourcing workflow would run)

- Query: KBV/G-BA opportunistic FIT volume statistics
- Source type: statutory insurance billing data (EBM codes)
- Fills: Germany.opportunistic_volume (quarantined until human-approved)

GAP-02 · all · competitor list price

Research this

Competitor brief says 'broadly similar list price' - no number anywhere in the pack. *Pricing pressure scenario in NL/PT/PL cannot be quantified.*

Research plan (what the sourcing workflow would run)

- Query: OncoStream tender records, national procurement portals
- Source type: public tender award notices
- Fills: competitor.list_price per market (quarantined until human-approved)

GAP-03 · company · IVDR certification timeline

Research this

Single source (company briefing, 'expected within about a year'); no corroboration. *A slip would not block CE-marked sales but matters for tenders.*

Research plan (what the sourcing workflow would run)

- Query: notified-body queue times for IVDR class C assays
- Source type: MedTech Europe / notified body reports
- Fills: company.ivdr_expected_months (quarantined until human-approved)

GAP-04 · all · penetration benchmark

Research this

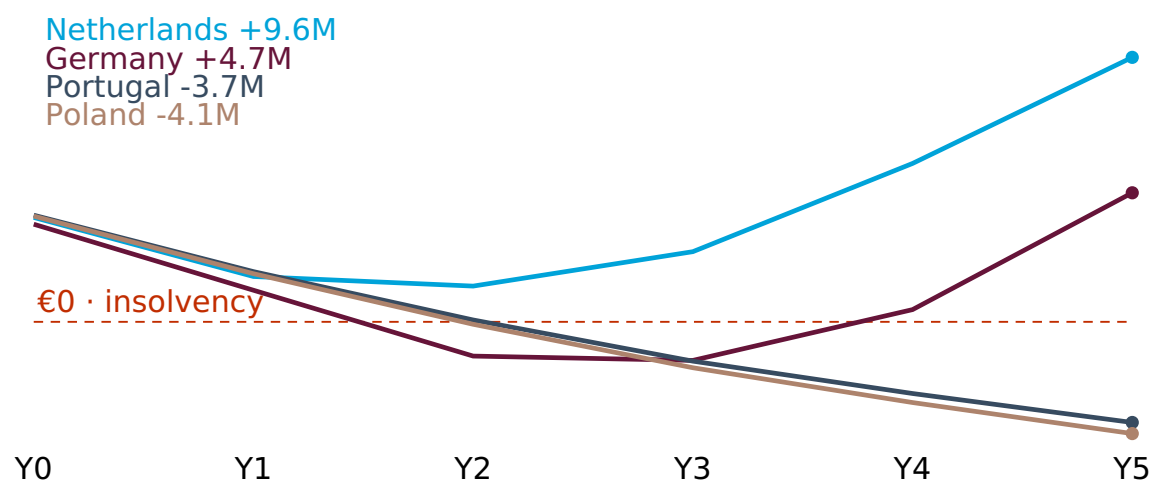
Ramp rests on ONE comparable pilot ('one fifth of eligible volume within three years'). *The single most sensitive model input; the $\pm 50\%$ ramp scenario brackets it.*

Research plan (what the sourcing workflow would run)

- Query: published uptake curves for triage assays post-reimbursement
- Source type: peer-reviewed screening-programme evaluations
- Fills: company.penetration_benchmark corroboration (quarantined until human-approved)

The pack is treated as the **closed source of truth**: no external data was mixed in. In production the Research action launches a sourcing workflow whose finds land in quarantine - parsed and previewed, entering the dataset only after human approval (provenance *EXTERNAL/approved-by*).

7· Conclusion: the five-year engine, all four markets



#	MARKET	ADDRESSABLE FIT+/YR	PRICE	BREAK- EVEN	CASH TROUGH	END CASH Y5	
1	Netherlands	159,910	€215	Year 3	€1.30M	€9.63M	survives
2	Germany	174,240	€235	Year 4	€-1.41M	€4.70M	insolvent
3	Portugal	40,656	€155	-	€-3.67M	€-3.67M	insolvent
4	Poland	61,880	€115	-	€-4.07M	€-4.07M	insolvent

Netherlands, year by year

YEAR	RAMP	TESTS	REVENUE	COGS/ TEST	GROSS MARGIN	EBITDA	CASH
Y1	0%	0	€0	€58	€0	€-2,150,000	€1,650,000
Y2	7%	11,194	€2,406,646	€54	€1,796,589	€-353,411	€1,296,589
Y3	13%	20,788	€4,469,484	€51	€3,409,281	€1,259,281	€2,555,870
Y4	20%	31,982	€6,876,130	€48	€5,356,985	€3,206,985	€5,762,855
Y5	22%	35,180	€7,563,743	€44	€6,015,814	€3,865,814	€9,628,669

Same engine as the Excel model (assumptions editable there); ramp anchored on the pack's benchmark : a comparable assay reached ~20% of eligible FIT-positive volume within 3 years of reimbursement. Germany's pre-reimbursement revenue is held at zero per its national report; its 24-month pathway consumes the runway before first revenue; the largest market is unaffordable now, not unattractive forever.

generated by the pipeline · inputs 13 files sha-pinned · deterministic core, AI at the edges,
evidence everywhere