

Accelerating Drug Repurposing with an Agentic AI Platform

Business goal: Move beyond low-margin generics by identifying high-value repurposing opportunities

Solution: Multi-agent platform integrating market, trials, patents, trade, web and internal data

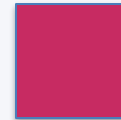
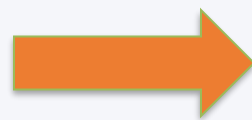
Outcome: Reduce early-stage research from months → days; produce auditable PDF reports



Problem

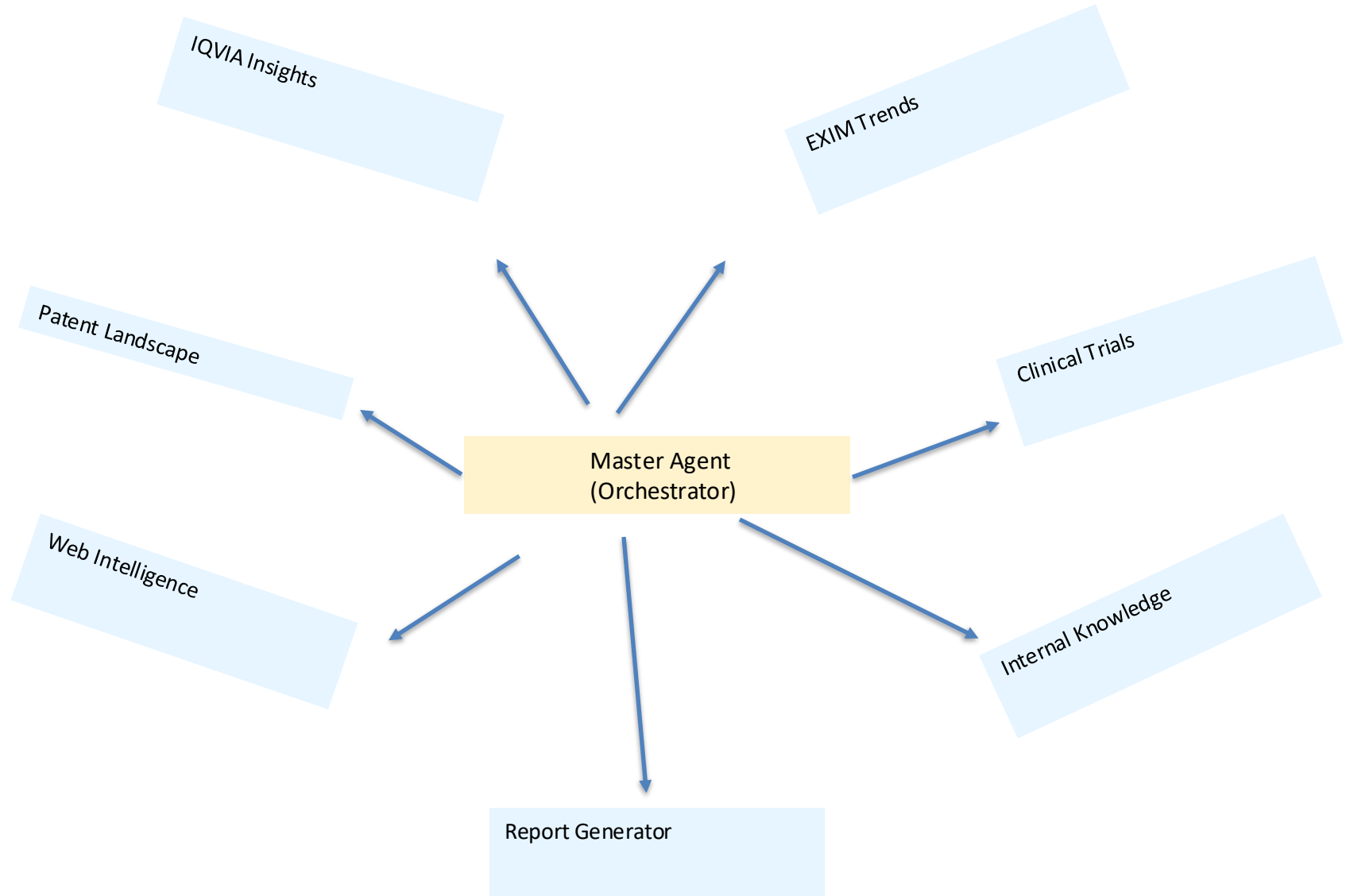


Solution



Outcome

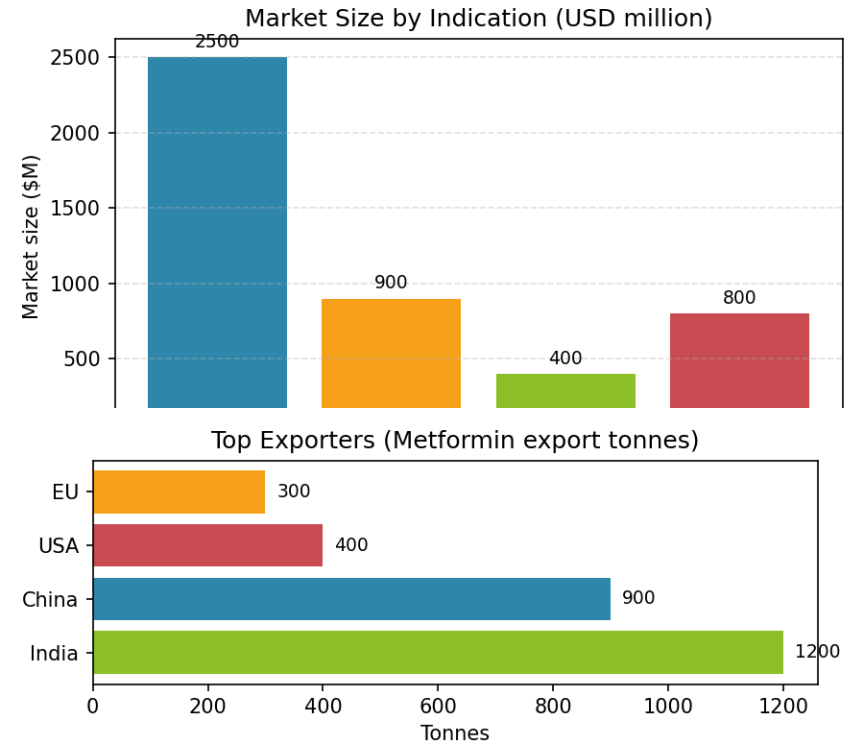
Multi-Agent Architecture — Master Agent + Worker Agents



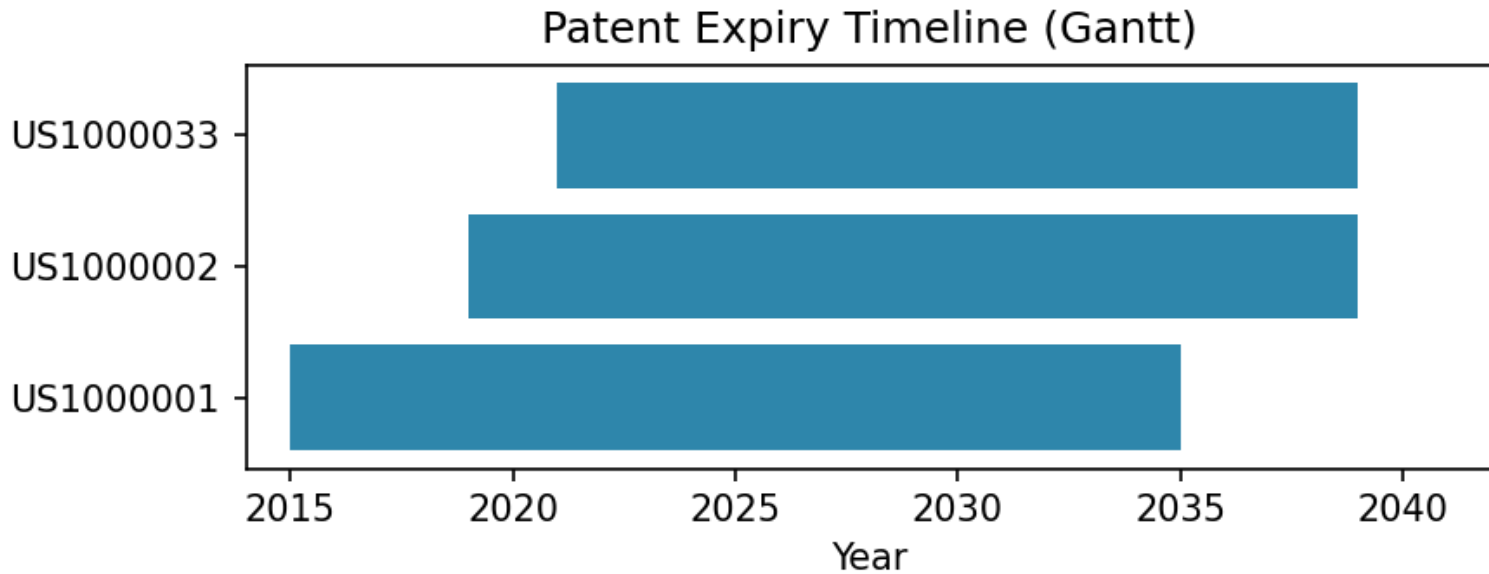
Outputs: tables, charts, trial lists, patent expiry timelines, RAG summaries, downloadable PDFs

End-to-End Journey — Example: Metformin Repurposing

- 1) User prompt: Find repurposing opportunities for metformin
- 2) Master Agent decomposes: market, trials, patents, web, internal
- 3) Worker outputs: market sizing, trial list, patents, literature snippets
- 4) Synthesis: prioritized hypothesis + next steps



Patent & Risk Assessment → Draft Product Story



Synthesis & Product Story

- Indication: Metformin sustained-release for diabetic nephropathy
- Value props: improved adherence, differentiated formulation, cost advantage
- Risks: IP watch, confirm FTO, regulatory path

Deliverables, Impact & Next Steps

Deliverables

- Executive PDF report (market, trials, patents, trade, internal insights)
- 5-slide summary deck (this deck)
- Pilot: validate 3 priority molecules

Pilot (4-6 wk)



Integrate real APIs (8-12 wk)



Scale & Ops