



Roche

Case Study:

AI-Powered Primary Screening for PD-L1+ NSCLC



MadeAi brings Roche accelerated systematic review screening with 95.5% AI-to-manual agreement, for advanced SLR support and high-quality results.



Challenge

Manual primary screening slows oncology SLRs

- Large, complex oncology literature sets require **precise PICOS screening**
- Manual title/abstract review and de-duplication are **time- and cost-intensive**
- Slow screening delays downstream analysis and decision-making



Solution

GenAI-enabled screening with protocol-driven logic

- PICOS translated into **12 algorithmic inclusion tags**
- AI-driven title/abstract screening and automated de-duplication
- Parallel manual review used to **validate accuracy and rigor**



Impact

High-accuracy screening at dramatically lower effort

- **200 oncology studies screened** (RCTs and SLRs)
- **95.5% agreement** between AI and manual screening
- **95.98% exclusion sensitivity** (95% CI: 92.23%–98.25%)
- **Primary screening completed in ~8 hours**, versus days or weeks manually
- Enabled **faster, more cost-effective SLR execution**