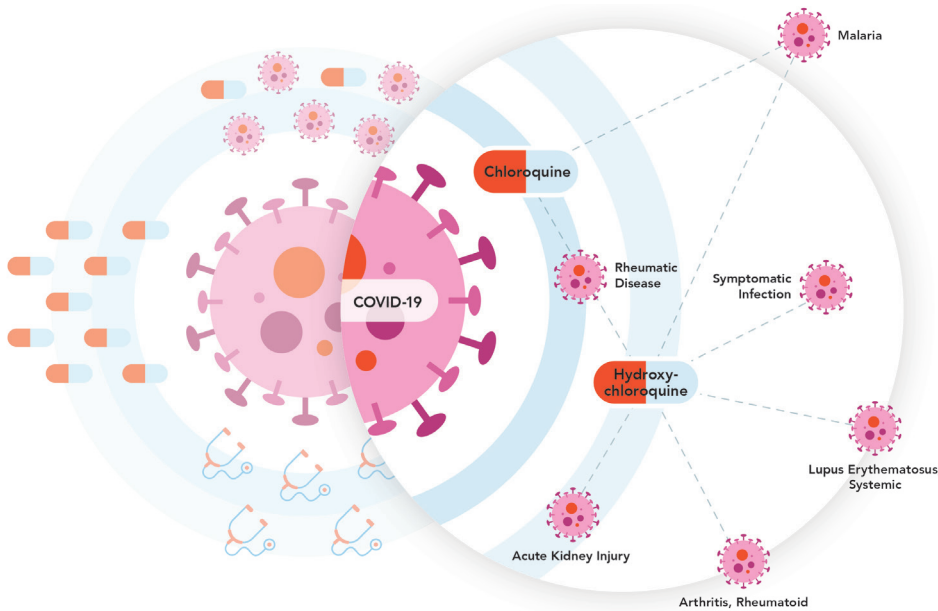# Expert.ai Life Sciences & Pharmaceutical Solutions

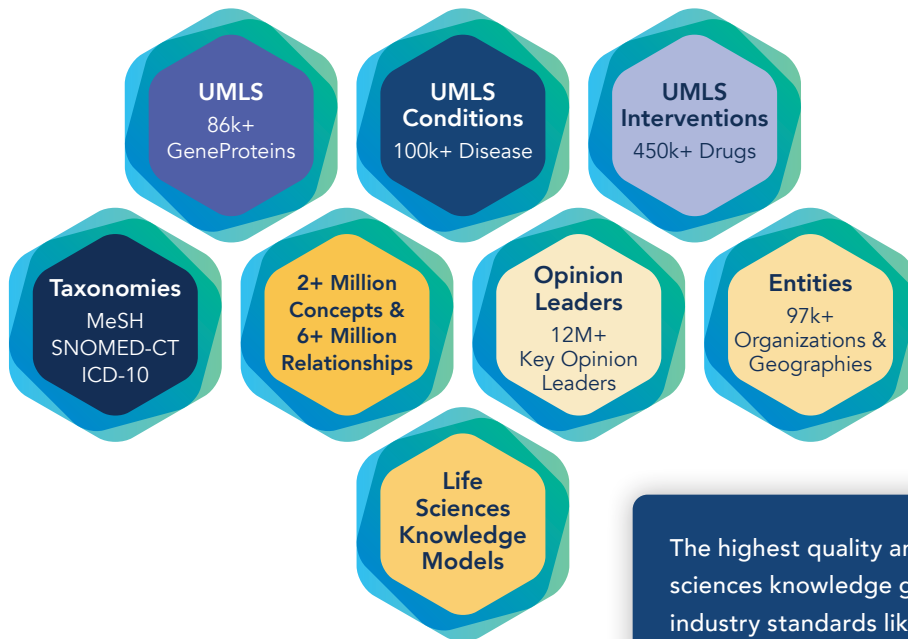**Sample Evidence-Based Knowledge Discovery: COVID-19**

Having timely access to relevant data accelerates decision making, reduces regulatory review cycles and helps bring better medical treatments to market faster. Leveraging artificial intelligence helps biomedical researchers monitor trends, discover new drugs and track key experts as they collaborate using the most current knowledge about diagnosis, treatment and prevention.

During analysis, research teams must be able to distill the most accurate, up-to-date information by disambiguating across mountains of content from diverse sources that may be repetitive, dated or worse, false. This is especially important considering the escalating costs of failed AI projects that overpromise, underdeliver and end up distracting, rather than empowering, research teams.

Expert.ai's Life Science and Pharmaceutical solutions provides medical, research, regulatory and knowledge management teams with the highest quality, standards-based and most consistent Life Sciences Knowledge Model available. Leading global research teams rely on expert.ai to:

- Automatically extract connections between biomedical entities in literature for in-depth causality analysis to support researchers.
- Monitor clinical trials and social media sources filtered by any combination of indication, drug, mechanism of action, sponsor or geography to gain insight for clinical trials.
- Accelerate the quality control process of preclinical reports prior to their submission to regulatory bodies.
- Identify experts and influencers beyond your network so you can drive therapeutic awareness with both established leaders and rising stars.
- Scan the latest scientific and biopharma news on drug approvals, trials, conferences and more to ensure users get instant updates for their topics of interest.
- Analyze safety signals on adverse events in medical cases and comparisons with known side effects as reported to regulatory authorities.

Expert.ai Life Sciences Knowledge Model

UMLS
86k+
GeneProteins

UMLS Conditions
100k+ Disease

UMLS Interventions
450k+ Drugs

Taxonomies
MeSH
SNOMED-CT
ICD-10

2+ Million Concepts & 6+ Million Relationships

Opinion Leaders
12M+
Key Opinion Leaders

Entities
97k+
Organizations & Geographies

Life Sciences Knowledge Models

The highest quality and most consistent life sciences knowledge graph available based on industry standards like MeSH, UMLS Conditions & Interventions, IUPAR and continuously updated from leading scientific publications.

Key Capabilities:

- Extract scientific data and related concepts based on technical language understanding that is explainable and easily fine-tuned by subject matter experts.

- Customizable solutions and endpoints designed for specific roles (i.e., Regulatory Review with comparative analytics to identify conflicts and inconsistencies that would likely result in FDA rejection).

- Scalable to support multiple publication sources, multiple disease areas and multiple types of medical data sources (i.e., regulatory reports, EHR medical notes, etc.).

- Bring complex and hidden relationships between biomedical entities to light, thanks to deep semantic enrichment.

- Stay up to date with the latest information through continuous review and data mining of biomedical content from Medline Publications, Clinical Trials, NIH-funded research, U.S. Patents, world news, social media and more.

- Visualize key relationships, launch dates, timeline information and other data with executive summaries, bulls-eye charts and other graphics in real time to support decision making.

- Customizable, fine-tunable and reusable knowledge models to meet specific business needs.