

# Linguamatics Professional Services

*Our expert Linguamatics professional services team can deliver on all your text analytics and knowledge discovery needs, providing essential NLP-based data insights to speed drug development and improve patient outcomes.*

For over 15 years, leading pharma, healthcare and government organizations have trusted Linguamatics to deliver actionable insights that address their most pressing bench-to-bedside challenges, with quantifiable ROI across multiple real world use cases.

By breaking down data silos, boosting innovation, enhancing quality, and reducing risk and complexity, we empower our clients to speed up drug development and improve patient outcomes.



## Industry leading expertise in biomedical NLP

The Linguamatics professional services team brings a unique blend of in-depth industry expertise in life science, healthcare, text mining and natural language processing (NLP) to help our customers solve their most challenging information extraction and knowledge discovery issues. Our team has experience in projects and solutions across the drug discovery and development cycle, real world data, electronic health records and more. We can work with multiple formats and types of data, including internal documents, scientific literature, patent documents, call centre feeds, pathology reports, nurses' notes and radiology reports.

Whether it's some lightweight hand-holding to help you through a project, or a full end-to-end project delivery, Linguamatics professional services is here to help. During these unprecedented times, the Linguamatics NLP team is also here to support you with COVID-19 specific research projects.

Our extensive knowledge and expertise come from hundreds of successfully completed customer projects across pharma, healthcare and government organizations. We can provide a tailored solution to meet your requirements, allowing you to focus on your key business and project goals. Linguamatics' unique blend of skills and experience, coupled with our collaborative approach to working with our customers, ensures the best possible project outcomes.

## Deployment & Training

- Linguamatics OnDemand
- On-premise and private cloud for PHI
- User, admin and programming training

## NLP & Domain Expertise

- Industry and domain knowledge across drug discovery, medical affairs, government, payer and provider
- NLP and AI skills to deliver advanced information extraction models
- Extensive work with scientific literature, clinical trials, FDA drug labels, internal documents and EHR data



## Systems Integration

- Integration with source systems such as Hadoop, Documentum, RDBMS, etc.
- Development of SOA-friendly web services
- Integration with data warehouse and MDM capabilities

## Hosting & Optimization

- Cloud deployment on AWS, Google Cloud or Azure
- On-premise optimization for billions of documents

## Solution Accelerators

- Turnkey projects
- Embedded team members
- Rapid implementation and time to value

- Life science and drug development
- Healthcare
- Government
- Text mining and search
- NLP, AI and machine learning
- Data visualization
- Implementation, integration and automation
- AWS and other cloud platforms
- Gold standards and validation
- Ontology and terminology development
- Multiple languages
- Many different document sources and types, both publicly available and proprietary
- OCR and document pre-processing
- Training

## Example projects

<b>SAFETY ASSESSMENT</b>	Development of an automated workflow to extract key safety related insights from final study reports, ante-mortem reports, post-mortem reports and protocols. Data automatically feed a knowledge base for safety assessment teams to assess the significance of new findings on pipeline compounds.
<b>CLINICAL TRIAL OPTIMIZATION</b>	Creation of an internal clinical trial protocols library, with automated extraction of key information from historical documents, including indication, patient inclusion and exclusion information, and assessment schedule. Data are fed into a knowledge graph for deeper understanding of legacy documents, to standardize and streamline future study designs and reduce trial amendments.
<b>EXTRACTION OF DETAILED CLINICAL INFORMATION</b>	An exciting project to extract and structure detailed clinical information from echocardiogram reports to identify aortic stenosis patients. Delivered highly accurate results of over 95% PPV and NPV on over one million echocardiogram reports.
<b>FEATURE EXTRACTION TO SUPPORT PREDICTIVE RISK MODELS</b>	Delivery of a large-scale project extracting hundreds of features from over 140 million clinical records to support machine learning models for predicting patient outcomes. Included extensive testing and evaluation to optimize a high availability, high throughput, NLP pipeline, to process up to eight million documents per hour.

### CONTACT US

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