Translational Solutions

Synexa's translational service is dedicated to understanding candidate therapeutics and biomarker data in order to generate clinically relevant data, using fresh human samples from both healthy and diseased populations.

Utilising a broad range of technologies, Synexa assesses candidate drugs in clinically relevant samples from a broad range of therapeutic indications, delivering critical insights including the safety profile, efficacy and mechanism of action, providing the assurance needed to confidently progress into clinical trials.

Key Insights

- **Early Efficacy & Safety Insights:** Assess drug efficacy, safety, and pharmacodynamics before clinical entry
- **Indication Prioritisation:** Evaluate therapeutic potential across multiple diseases to refine focus
- **Competitive Benchmarking:** Compare against drug leads against marketed competitors
- **Rapid Iteration:** Accelerate development with efficient testing cycles

Why Synexa?

- Access to ethically sourced human biological samples and comprehensive clinical data through our extensive clinical research network
- Over two decades of experience
- Agile, customised assay design and consultative approach
- Utilisation of a broad range of cutting-edge technologies including Olink, MSD, dPCR and flow cytometry
- End-to-end support, from initial planning and experimental design through to sample processing and data analyses

Unrivalled access to fresh human biological samples

Synexa's clinical network is extensive; we collaborate with a wide range of clinicians who provide fresh (healthy and diseased) human biological samples from patients in support of clinical studies. All samples are ethically sourced, with each individual patient providing their consent to participate in studies as well as national regulatory guidelines being adhered to.

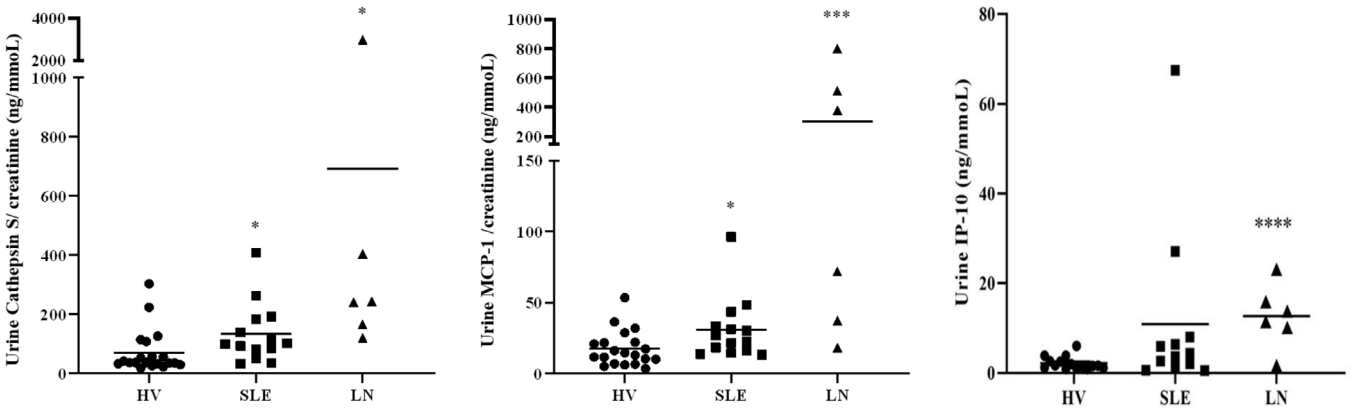
Visit synexagroup.com/translational to learn more or email our team at **contactus@synexagroup.com** to speak to a scientist.

synexa | Life Sciences

Case Studies

Biomarker Selection and Quantification

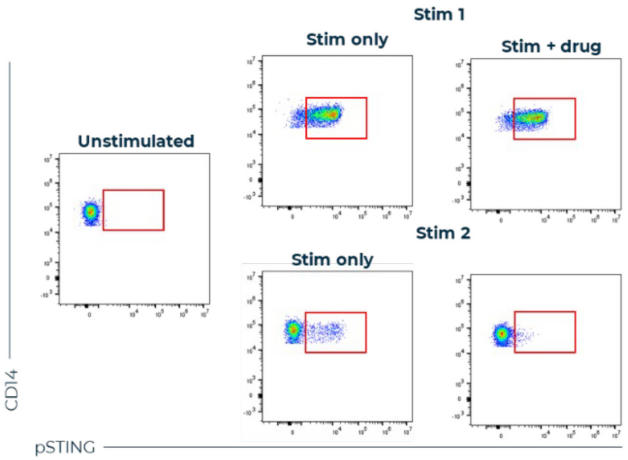
The Western Cape region of South Africa has one of the highest incidences of Lupus in the world, with a strong predisposition to Lupus Nephritis. This translational study used ELISA and ECL-based assays to determine the differences in biomarker levels in urine samples of HV, SLE and LN participants. Results indicated that SLE samples (with and without LN) had increased concentrations of Cathepsin S and MCP-1 in urine compared to HVn, and LN participants also had increased concentrations of IP-10.

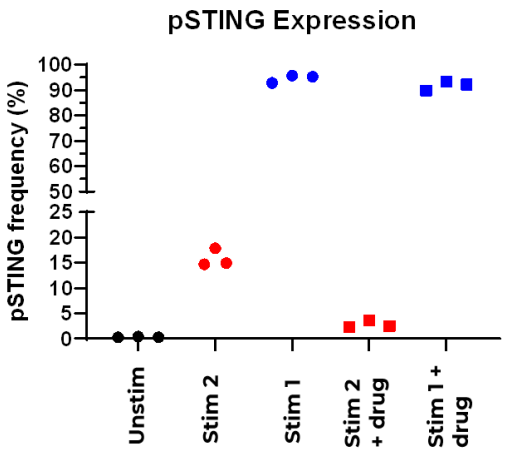


*Horizontal lines indicate mean. *p<0.05 versus healthy volunteer; ***p<0.001 versus healthy volunteer; p<0.0001 versus healthy control*

Drug Target Engagement

Various factors can lead to flares in individuals with Systemic Lupus Erythematosus (SLE). Given drug candidates target specific molecules in signaling pathways, a translational study was set up to assess pSTING pathway-specific inhibition by a drug candidate. The pSTING pathway can be activated by specific stimulation at defined points. Compounds that inhibit highly specific points in this pathway were combined with inhibitors to demonstrate target engagement. The assay utilised a flow cytometry panel along with fresh SLE samples sourced via Synexa's clinical network.





Visit synexagroup.com/translational to learn more or email our team at **contactus@synexagroup.com** to speak to a scientist.

synexa | Life Sciences