

LICENSING OPPORTUNITY:

Immune biomarkers for diagnosis of Axial Spondyloarthritis

BACKGROUND INFORMATION

Spondyloarthritis (SpA) is a group of rheumatic diseases with a heterogeneous clinical presentation, which can be classified as axial (ax) and peripheral SpA.

AxSpa, predominantly characterized by inflammatory back pain, has an estimated prevalence of 0.7%. However, due the *lack of an appropriate serological test*, there is a

diagnostic delay of 5-10 years. Moreover, at present it is challenging to *distinguish between axSpA patients and persons with chronic low back pain* at an early stage, as diagnostic criteria are lacking.

Hasselt University and KU Leuven have discovered and validated *3 new biomarkers in plasma/serum* for diagnosis of axSpA.



UHASSELT

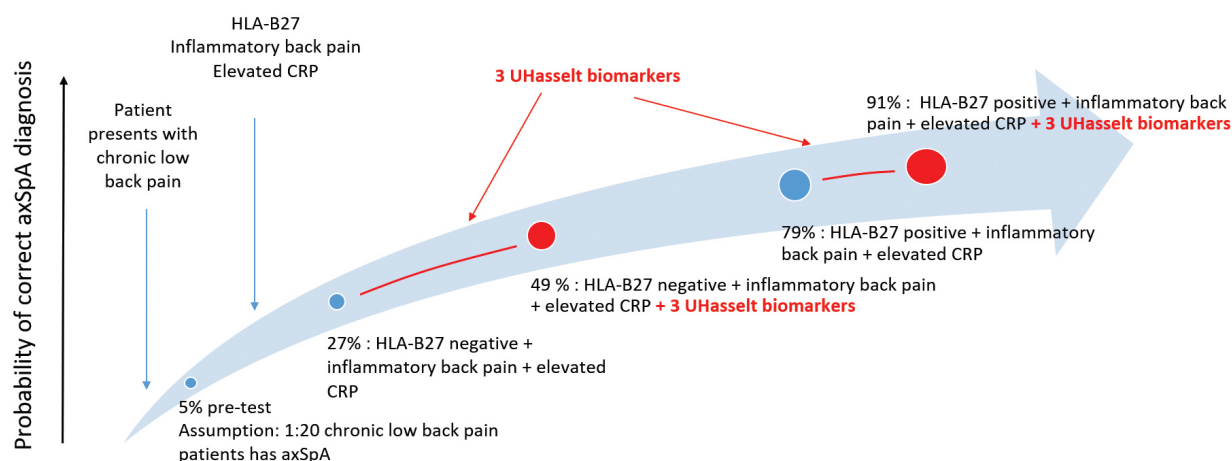
KNOWLEDGE IN ACTION

COMPELLING RESULTS

The 3 UHasselt biomarkers have a *sensitivity of 14% and a corresponding specificity of 95%* in chronic low back pain patients.

Combined with the presence of inflammatory back pain, and the currently used laboratory markers HLA-B27 and CRP, the 3 UHasselt biomarkers *increase the probability of correct axSpA diagnosis*

- ° from **79% to 91%** for HLA-B27 positive patients with inflammatory back pain and elevated CRP;
- ° from **27% to 49%** for HLA-B27 negative patients with inflammatory back pain and elevated CRP;



MARKET POTENTIAL

With a population prevalence between 0.3 - 1.4% and a diagnostic prevalence of 0.2 - 0.7%, better axSpA diagnosis will have a large potential.

While treatment of axSpA has been largely improved in the last decennia, diagnostics is still very limited. With a *compound annual growth rate (CAGR) of 7%* for the therapeutic market, *better and earlier diagnosis is key*.

Using our biomarkers, axSpA patients can be diagnosed better and earlier, resulting in earlier and correct treatment.

KEY FEATURES AND ADVANTAGES

Diagnostic value of 3 biomarkers, *validated* in 2 independent cohorts (n=260).

Research ELISA assays translated to *high throughput peptide ELISA assays*.

Possibility to better *diagnose* axSpA patients and *start correct treatment earlier*.

Hasselt University and KU Leuven have a *strong IP protection* for the biomarkers.

OUTSTANDING OPPORTUNITY

Patent application is available for licensing. Both universities are searching for interested parties to complete development and commercialization.

RELEVANT PUBLICATION

Quaden *et al.*, Arthritis Rheumatol. 2020 Jul 8. doi: 10.1002/art.41427

BUSINESS DEVELOPER

Sofie Ignoul, PhD
UHasselt - Biomedical Research Institute

T +32 (0) 497 78 01 76

sofie.ignoul@uhasselt.be
biomed.bd@uhasselt.be