Biomarkers in overactive bladder: Where do we stand today?

Without curative treatment, biomarkers’ role remains limited

Additionaly, OAB is defined as a symptom complex that includes both urgency and nocturia. According to the International Continence Society (ICS) OAB is defined as urgency urinary incontinence, with or without urgency urinary incontinence, and nocturia. As an obvious corollary, it is difficult to support the prescription of current or very soon available medications, like antimuscarinics, 5-hydroxytryptamine receptor antagonists, or onabotulinumtoxinA in individuals without symptoms, despite a positive biomarker. In fact, all these therapeutic options are symptomatically oriented and not intended to cure OAB.

There are, however, some patients who might immediately benefit from the existence of an OAB biomarker. These are patients with stress urinary incontinence (SUI), who also complain of urgency. When a few drops of urine leaking into the posterior urethra trigger a sensation of urgency or urinary incontinence, another group of patients that might benefit from biomarkers are those with mixed urinary incontinence (MUI).

As a matter of fact, MUI is still treated empirically, after presuming from the past history and bladder diary which symptoms are more relevant. In addition, one cannot ignore that urgency is difficult to explain by caregivers and difficult to standardized. In other words, the interpretation of subjective desire to void, but still with full control of bladder function, is a classical example of a symptom that may be difficult to interpret. Notably, phenoxyphapating or genotyping patients may become relevant once difficult treatment options become available.