

Accepted Manuscript

Urinary biomarkers in childhood lupus nephritis

Eve M.D. Smith, Michael W. Beresford

PII: S1521-6616(16)30118-8
DOI: doi: [10.1016/j.clim.2016.06.010](https://doi.org/10.1016/j.clim.2016.06.010)
Reference: YCLIM 7673

To appear in: *Clinical Immunology*

Received date: 15 May 2016
Revised date: 26 June 2016
Accepted date: 27 June 2016



Please cite this article as: Eve M.D. Smith, Michael W. Beresford, Urinary biomarkers in childhood lupus nephritis, *Clinical Immunology* (2016), doi: [10.1016/j.clim.2016.06.010](https://doi.org/10.1016/j.clim.2016.06.010)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Urinary biomarkers in childhood Lupus Nephritis

Eve MD Smith¹, Michael W Beresford^{1,2}

¹Department of Women's & Children's Health, Institute of Translational Medicine, University of Liverpool, Institute in the Park, Alder Hey Children's NHS Foundation Trust Hospital, East Prescott Road, Liverpool, L14 5AB, UK. esmith8@liverpool.ac.uk

²Department of Paediatric Rheumatology, Alder Hey Children's NHS Foundation Trust in the Park, East Prescott Road, Liverpool, L14 5AB, Liverpool, UK.
m.w.beresford@liverpool.ac.uk

Corresponding author: Dr Eve Smith

Abstract

Juvenile-onset systemic lupus erythematosus (JSLE) is a rare, severe multisystem autoimmune disease affecting the kidney (Lupus Nephritis, LN) in up to 80% of children. LN is more severe in children than adults, with potential for irreversible kidney damage requiring dialysis or transplant. Renal biopsy is currently the gold standard for diagnosing and monitoring LN, however, it is invasive and associated with complications. Urine biomarkers have been shown to be better than serum biomarkers in differentiating renal disease from other organ manifestations. Over the past decade, there have been an increasing number of studies investigating specific candidate biomarkers implicated in the pathogenesis of LN or screening for urinary biomarkers using hypothesis free methods. In this review, developments in urine biomarkers for LN will be reviewed, highlighting those that are of relevance to children and have gone through validation in independent international patient cohorts, bringing them close to clinical translation.

Keywords

Urine, biomarkers, Lupus Nephritis, Childhood Lupus, JSLE

Download English Version:

<https://daneshyari.com/en/article/8721470>

Download Persian Version:

<https://daneshyari.com/article/8721470>

[Daneshyari.com](https://daneshyari.com)