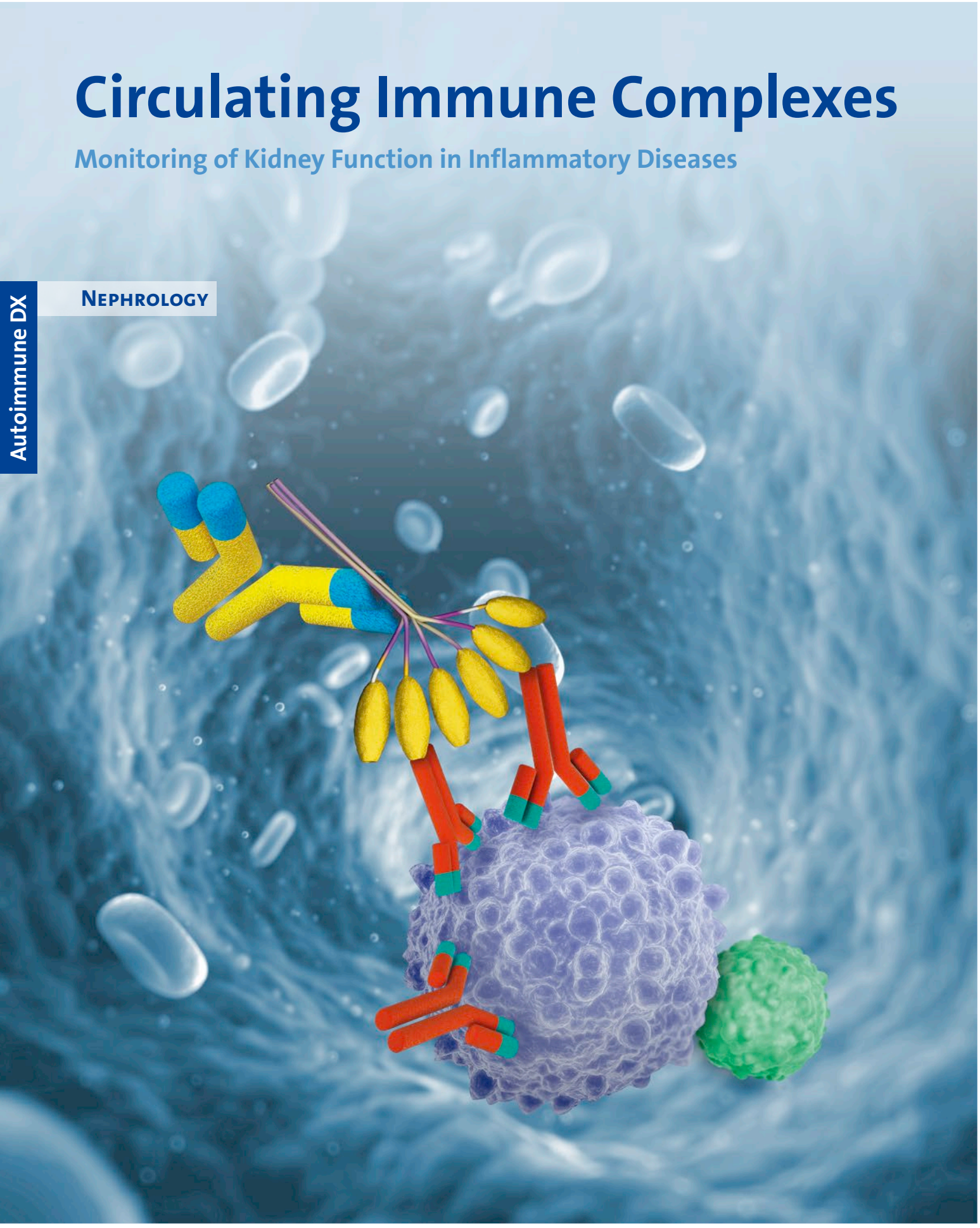
Circulating Immune Complexes

Monitoring of Kidney Function in Inflammatory Diseases

Autoimmune DX

NEPHROLOGY



IMTEC

Human

Diagnostics Worldwide

Fast and Reliable Results

Circulating Immune Complexes (CIC):

Leading to complement activation

Complement is part of the innate immune system. Its major function is recognition and elimination of pathogens.[1] Complement activity plays also an important role in the pathogenesis of systemic autoimmune diseases.[1] It is activated amongst others by CIC in the blood stream. In the process of complement activation split products like C3d can be detected in patients suffering lupus nephritis[2] or in patients with cutaneous systemic scleroderma[3,5]. Patients with systemic autoimmune diseases might also develop antibodies targeting components of the complement cascades. One of the important components that is been targeted is C1q.[4,5] Anti-C1q autoantibodies are indicative for lupus nephritis[6,7,8] but can also be found in other conditions and inflammatory diseases.[2,9,10]

Frequency of C1q autoantibodies found in various conditions.

Hypocomplementemic urticarial vasculitis syndrome	100 %	**Polyarteitis nodosa**	27 %
MTCD	94 %	**Polychondritis**	17 %
Felty's syndrome	76 %	**Sjögren's syndrome**	13 %
HCV	26–38 %	**Glomerulonephritis**	3–50 %
Rheumatoid vasculitis	31 %	**HIV**	13 %
Rheumatoid arthritis	30 %	**Healthy individuals** Children	0–3 %
SLE	30–100 %	Adults	4–18 %

HUMAN Autoimmune diagnostic assays combine technology & science

- C1q molecules are bound to the surface of ELISA using patented technologies
- Ensuring the preservation of epitopes for the Anti-C1q-Antibodies ELISA
- Ensuring the biological activity for the CIC-IgG ELISA
- Special sample dilution buffer ensures the exclusive detection C1q autoantibodies
- Combing CIC-IgG & C3d-CIC ELISA technologies helps to distinguish between different complement activation pathways*

The IMTEC Product Line

ELISA Cat. No.

IMTEC-CIC Screen (cut-off) *96 Tests* ITC59030
ELISA for the Detection of C1q Binding
Cirgulating Immune Complexes (IgG/IgM)

IMTEC-CIC IgG *96 Tests* ITC59031
ELISA for the Quantitative Determination
of C1q Binding Circulating Immune Complexes (IgG)

IMTEC-Anti-C1q-Antibodies *96 Tests* ITC59033
ELISA for the Quantitative Determination
of free C1q autoantibodies, indicative for lupus nephritis (IgG)

Cat. No.

IMTEC-C3d-CIC *96 Tests* ITC59032
ELISA for the Quantitative Determination
of Circulating C3d-binding Immune Complexes (IgG)

IMTEC-Complement Activity *96 Tests* ITC59035
ELISA for the Quantitative Determination
of complement activity (IgG)

[1] Chen et al., 2009; [2] Manzi et al., 1996; [3] Senaldi et al., 1989; [4] Botto and Walport 2002; [5] Braun et al., 2007; [6] Sinico et al., 2005; [7] Moura et al., 2009; [8] Tan et al., 2013; [9] Potlukova and Kralikova 2007; [10] Saadoun et al., 2006

* Classical & Alternative Complement Activation Pathway

IMTEC

Human
Diagnostics Worldwide

HUMAN Gesellschaft für Biochemica und Diagnostica mbH
Max-Planck-Ring 21 · 65205 Wiesbaden · Germany
Tel. +49 6122-9988-0 · Fax +49 6122-9988-100 · e-mail: human@human.de · www.human.de