

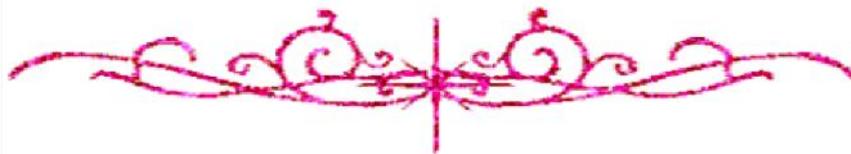
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# بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

مركز الشبكات وتكنولوجيا المعلومات

قسم التوثيق الإلكتروني



hossam maghraby



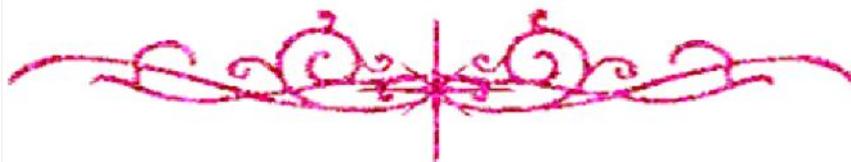
# جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم

قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها

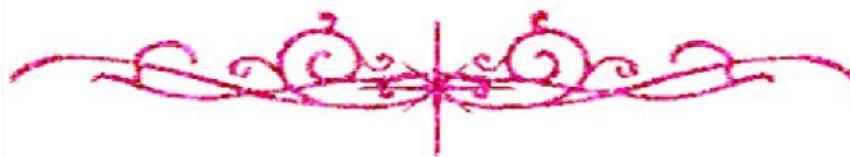
علي هذه الأقراص المدمجة قد أعدت دون أية تغييرات



**hossam maghraby**



**بعض الوثائق الأصلية تالفة  
وبالرسالة صفحات لم ترد بالأصل**



ANTI - NEUTROPHIL CYTOPLASMIC ANTIBODIES  
(ANCA)-ASSOCIATED GLOMERULONEPHRITIS

Thesis

Submitted in Partial Fulfillment of Master Degree  
in Clinical Pathology

By

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Thanks to *Allah*, the most helpful merciful beneficent, for giving me the force and patience to complete this work.

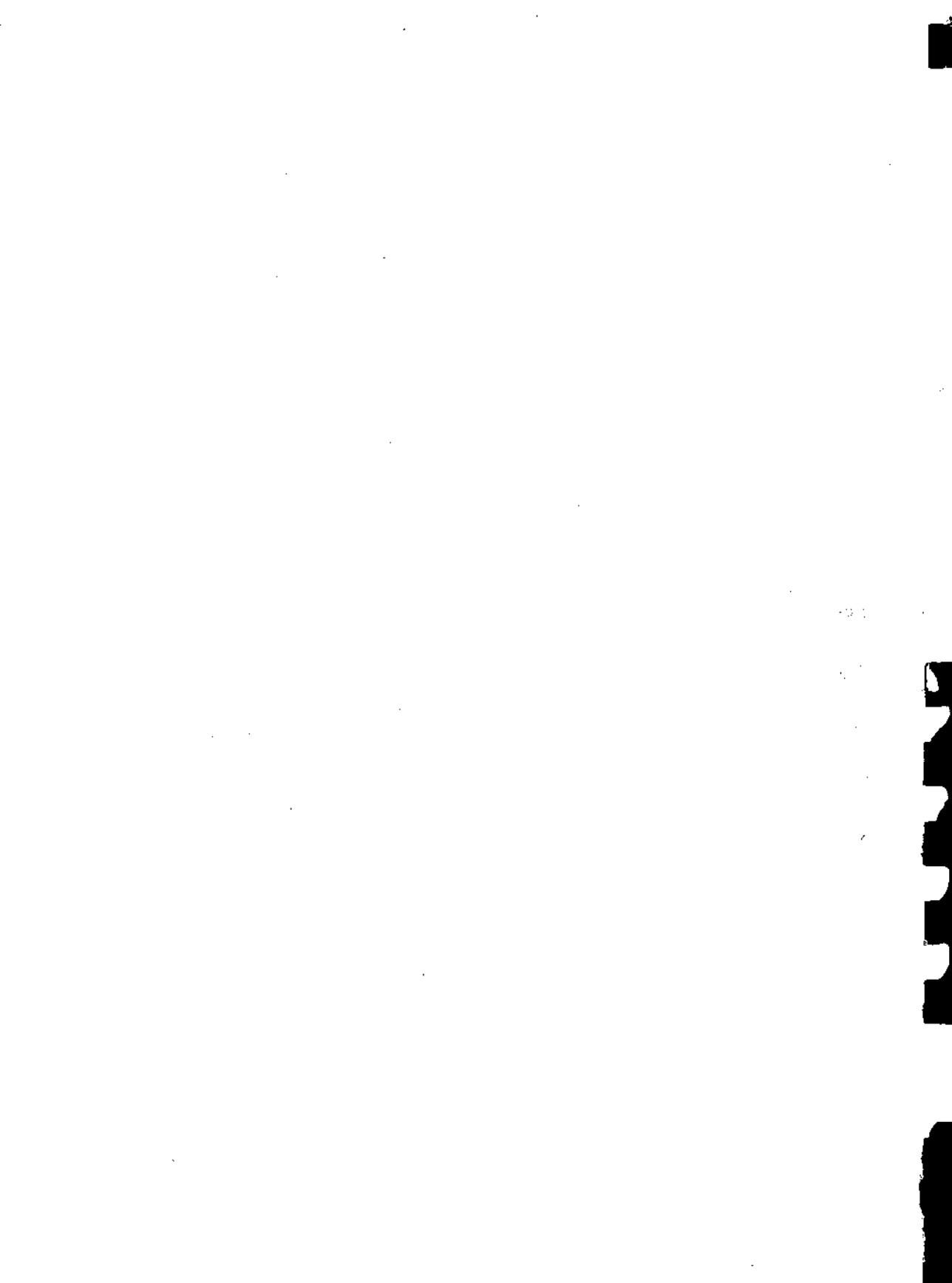
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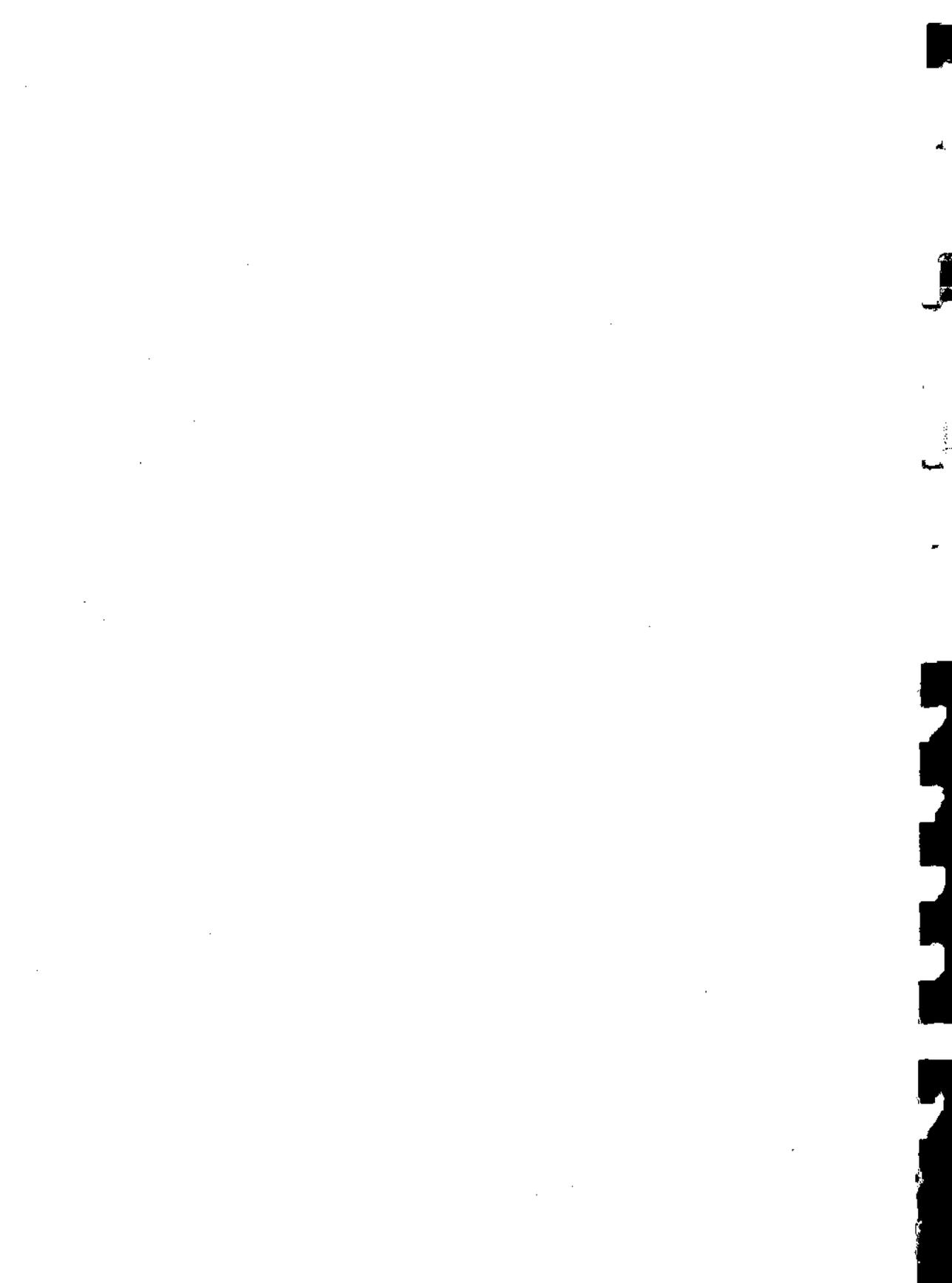
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*Adel Hamdy El-Sadawy*



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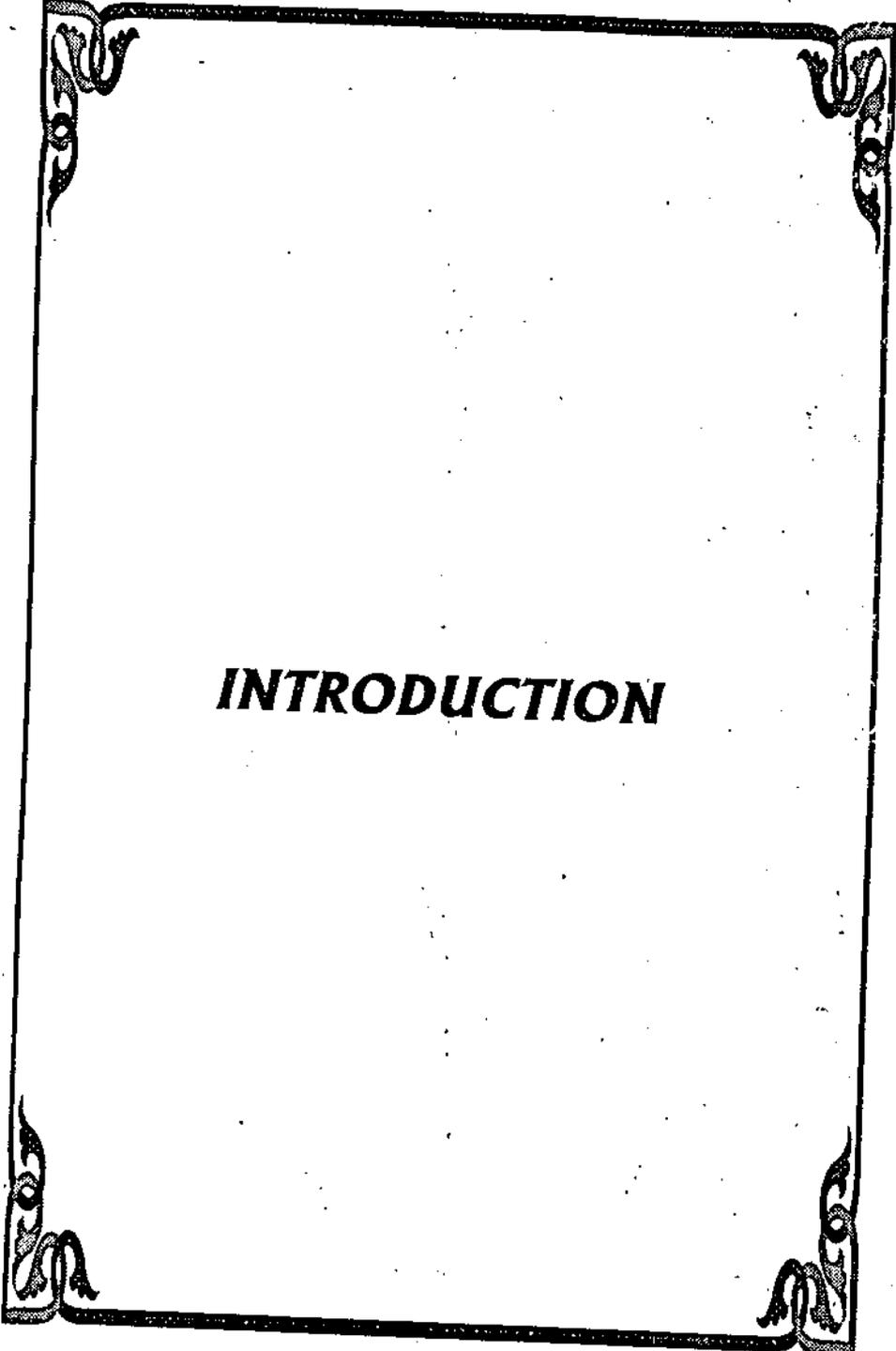
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## **ABBREVIATIONS**

ALT	Alanine amino transferase
ANA	Anti-nuclear antibodies
ANCA	Antineutrophil cytoplasmic antibodies
a-ANCA	atypical antineutrophil cytoplasmic antibodies
ANF	Atrial natriuretic factor
AST	Aspartate amino transferase
c-ANCA	Cytoplasmic antineutrophil cytoplasmic antibody
CAP57	Cationic antimicrobial protein 57
CIC	Circulating immune complex
CRP	C- reactive protein
CSS	Churg-Strauss syndrome
DBP	Diastolic blood pressure
FGS	Focal global sclerosis
FSGS	Focal segmental glomerulosclerosis
GBM	Glomerular basement membrane
GN	Glomerulonephritis
GS-ANA	Granulocyte - specific antinuclear antibody
HBsAg	Hepatitis B surface antigen
HLE	Human leucocyte elastase
IBD	Inflammatory bowel disease
IgAN	Immunoglobulin A nephropathy
IIF	Indirect Immunofluorescence
IVIg	Intravenous immunoglobulin
LDH	Lactate dehydrogenase
MGN	Membranous glomerulonephritis
MPA	Microscopic polyarteritis
MPGN	Membrano-proliferative glomerulonephritis

MPO	Myeloperoxidase
NCGN	Necrotizing crescentic glomerulonephritis
PAN	Polyarteritis nodosa
P-ANCA	Perinuclear antineutrophil cytoplasmic antibody
PBS	Phosphate - buffered saline
PE	Plasma exchange
PR3	Proteinase 3
PSGN	Post streptococcal glomerulonephritis
PTU	Propylthiouracil
RA	Rheumatoid arthritis
RPGN	Rapid progressive glomerulonephritis
RIA	Radio - immuno assay
SBE	Subacute bacterial endocarditis
SLE	Systemic lupus erythematosus
T/S	Trimethoprim / Sulfamethoxazole
W.G	Wegener's granulomatosis.



**INTRODUCTION**



## ***Introduction and aim of the work.***

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### ***Introduction :***

Anti-neutrophil cytoplasmic antibodies (ANCA) are heterogeneous group of autoantibodies with a wide and diverse range of clinical associations. In vasculitis the diagnostic utility of proteinase 3 (PR3)-ANCA and myeloperoxidase-ANCA for Wegener's granulomatosis and microscopic polyangiitis, respectively, is now well established. Because of their significance as tools for diagnosis and prognosis, these autoantibodies have been analyzed extensively as markers for underlying immunopathogenic disturbances (Gross and Csernok, 1995).

Renal vasculitis frequently presents itself as rapidly progressive glomerulonephritis (GN), but its diagnosis may be hampered by the difficulty in demonstrating classic vasculitic lesions in renal biopsy specimens.

Early diagnosis of renal vasculitis has been greatly enhanced by the advent of antineutrophil cytoplasmic autoantibodies (ANCA). (Wen, 1994). ANCA are not only the markers for vasculitis but may also play a role in the pathogenesis by activating the neutrophils to attack target blood vessels (Wen, 1994). ANCA-associated vasculitis responds well to steroid and / or cyclophosphamide therapy. Renal failure in these patients is frequently reversible if treated early. Long term patient and kidney survival rate are good with proper treatment and far better than of the other causes of rapidly progressive glomerulonephritis (Wen, 1994).

De Oliveira et al, 1995, had demonstrated that changes in ANCA concentration may reflect changes in disease activity as patients whom ANCA were detectable one year or more after treatment, were at particular risk of clinical relapse. Also the temporal relationship between changes in ANCA concentration and clinical relapse varied considerably between patients.

### ***Aim of Work :***

This work aimed at examining the prevalence and clinical association of ANCA in patients with glomerulonephritis to detect the risk of relapse and to determine the need for frequent clinical review besides the possible use of ANCA as a marker for continuing maintenance immunosuppression therapy.

