Table V. Diagnostic laboratory evaluation for neutropenia

Test	Comments
Serial CBC	Observation over time of the CBC is often the best approach
ESR /CRP	Elevation in the absence of any overt infection suggests underlying infection due to neutropenia or presence of autoimmune disease
ANA, C3, C4, anti-DNA	Screen for collagen vascular disease
MMA, Hcy, Cu, ceruloplasmin, pyridoxine	These micronutrients are associated with marrow failure
BMA / BX / cytogenetics	Bone marrow aspirate (BMA) and biopsy (BX). We always obtain marrow cytogenetics as well to address possibility of MDS
CD3/CD16, 56, 57	NK/cytotoxic T cell subsets. A clone of > 20% suggests LDLGL
Genetic testing	Specific gene tests are available for several of the congenital neutropenias.
Tests in bold constitute an initial screen; ESR=erythrocyte sedimentation rate, CRP=C-reactive protein, ANA=anti nuclear antibody, C3-C4=third and fourth complement components, anti-DNA=anti double stranded DNA antibodies, MMA=methylmalonic acid, HcY=homocysteine, MDS= myelodysplastic syndrome, LDLGL=lymphoproliferative disorders of large granular lymphocytes	