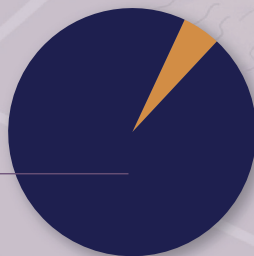


This pocket card belongs to the SM diagnostic test pocket card series.

High-Sensitivity *KIT* D816V Testing Can Help You Investigate a Systemic Mastocytosis Diagnosis

The most common *KIT* mutation in systemic mastocytosis (SM) is *KIT* D816V, which is found in

~95%
of cases of SM^{1,2}



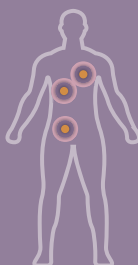
KIT is a tyrosine kinase receptor that plays a key role in regulating mast cell proliferation. SM is driven by activating mutations of *KIT*^{3,4}



KIT D816V is a reliable diagnostic and prognostic marker for SM^{3,4}



The presence of *KIT* mutation(s) at codon 816 or in other regions of *KIT* is one of the WHO minor criteria for SM⁵



ECNM recommends the use of high-sensitivity methods (e.g. ddPCR) for screening *KIT* D816V in peripheral blood upon clinical suspicion of SM⁶

DISCOVERSM



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Suspecting SM: *KIT* D816V Testing

Common symptoms of SM include

typical skin lesions, unexplained osteoporosis, anaphylaxis, histamine-induced symptoms (cramping, headache, hypotension, diarrhoea), cytopenia and eosinophilia, and splenomegaly⁶

Consider screening for *KIT* D816V mutation in combination with or after serum tryptase determination (>11.5 ng/mL) in patients with suspected SM⁶



Highly sensitive PCR methods (e.g. ddPCR with ~0.01% sensitivity) are recommended for the detection of *KIT* D816V in peripheral blood^{3,6}

In a study of ISM patients (n=39):⁷



95%
detection of *KIT* D816V mutation with ddPCR assay



Next-generation sequencing assays have low sensitivity and are not sufficient to detect *KIT* D816V mutation^{2,3}



28%
detection of *KIT* D816V mutation with NGS assay

Note: The high-sensitivity *KIT* D816V assay is one of several tests that can be used for SM suspicion. Further workup involves assessing if the patient meets WHO criteria for SM diagnosis⁵

For more information, visit: www.systemicmastocytosis-hcp.com

ddPCR=droplet digital polymerase chain reaction; ECNM=European Competence Network on Mastocytosis; WHO=World Health Organization.

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