

**VMA (VANILMANDELIC  
ACID), RANDOM  
URINE**

(HPLC)

VMA

**mg/g creatinine**

<b>ANALYTE</b>	<b>AGE IN YEARS</b>	<b>REFERENCE RANGE IN mg/g creatinine</b>
Urine VMA	0 -2	<18.8
	>2-5	<11
	>5-10	<8.3
	>10-19	<8.3
	>19 years	<5.5

**Comment**

VMA is the urinary metabolite of both Epinephrine and Norepinephrine. It is increased along with other catecholamine metabolites in patients with Pheochromocytoma, Neuroblastoma and other Neural crest tumors. It is useful for screening children for catecholamine secreting tumors. It is also used to support the diagnosis of Neuroblastoma and monitor therapy.