

檢驗名稱	Somatomedine C 類胰島素成長因子	英文名稱	Somatomedine C (IGF1)																																																																																																																																																																																
檢驗代碼	24023	健保編號(點數)	480																																																																																																																																																																																
檢體種類	Serum	檢驗方法	CLIA																																																																																																																																																																																
採集容器	含 Gel 血清管	操作時間	每天																																																																																																																																																																																
採檢體量	3mL	報告時間	三個工作天																																																																																																																																																																																
送檢時間	每天	操作單位	聯合醫事檢驗所																																																																																																																																																																																
採檢注意 (病人準備)	無																																																																																																																																																																																		
檢體保存	檢體可以保存在 2-8°C 24 小時。如無法 24 小時內分析，於-20°C 可保存 12 個月。																																																																																																																																																																																		
生物參考區間	<table border="1"> <thead> <tr> <th colspan="4">IGF-1 Pediatric Reference Ranges</th> <th colspan="3">IGF-1 Adult Reference Ranges</th> <th colspan="4">IGF-1 Tanner Stage Reference Ranges</th> </tr> <tr> <th>Gender</th> <th>Age (y)</th> <th>Median</th> <th>Central 95% Range</th> <th>Age (y)</th> <th>Median</th> <th>Central 95% Range</th> <th>Gender</th> <th>Tanner Stage</th> <th>Median</th> <th>Central 95% Range</th> </tr> </thead> <tbody> <tr> <td>Male</td> <td>0-3</td> <td>44</td> <td>&lt;15.0-129</td> <td>19-21</td> <td>207</td> <td>117-323</td> <td>Male</td> <td>1</td> <td>144</td> <td>63.2-271</td> </tr> <tr> <td>Male</td> <td>4-6</td> <td>96</td> <td>22.0-208</td> <td>22-24</td> <td>175</td> <td>98.7-289</td> <td>Male</td> <td>2</td> <td>240</td> <td>114-411</td> </tr> <tr> <td>Male</td> <td>7-9</td> <td>132</td> <td>40.1-255</td> <td>25-29</td> <td>160</td> <td>83.6-259</td> <td>Male</td> <td>3</td> <td>298</td> <td>166-510</td> </tr> <tr> <td>Male</td> <td>10-11</td> <td>177</td> <td>68.7-316</td> <td>30-34</td> <td>136</td> <td>71.2-234</td> <td>Male</td> <td>4</td> <td>290</td> <td>170-456</td> </tr> <tr> <td>Male</td> <td>12-13</td> <td>305</td> <td>143-506</td> <td>35-39</td> <td>126</td> <td>63.4-223</td> <td>Male</td> <td>5</td> <td>257</td> <td>161-384</td> </tr> <tr> <td>Male</td> <td>14-15</td> <td>322</td> <td>177-507</td> <td>40-44</td> <td>122</td> <td>58.2-219</td> <td>Female</td> <td>1</td> <td>186</td> <td>71.4-394</td> </tr> <tr> <td>Male</td> <td>16-18</td> <td>284</td> <td>173-414</td> <td>45-49</td> <td>120</td> <td>53.3-215</td> <td>Female</td> <td>2</td> <td>288</td> <td>122-508</td> </tr> <tr> <td>Female</td> <td>0-3</td> <td>68</td> <td>18.2-172</td> <td>50-54</td> <td>108</td> <td>48.1-209</td> <td>Female</td> <td>3</td> <td>329</td> <td>164-545</td> </tr> <tr> <td>Female</td> <td>4-6</td> <td>105</td> <td>35.4-232</td> <td>55-59</td> <td>108</td> <td>44.7-210</td> <td>Female</td> <td>4</td> <td>319</td> <td>174-480</td> </tr> <tr> <td>Female</td> <td>7-9</td> <td>139</td> <td>56.9-277</td> <td>60-64</td> <td>112</td> <td>43.0-220</td> <td>Female</td> <td>5</td> <td>274</td> <td>169-400</td> </tr> <tr> <td>Female</td> <td>10-11</td> <td>248</td> <td>118-448</td> <td>65-69</td> <td>110</td> <td>40.2-225</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Female</td> <td>12-13</td> <td>323</td> <td>170-527</td> <td>70-79</td> <td>92</td> <td>35.1-216</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Female</td> <td>14-15</td> <td>317</td> <td>191-496</td> <td>80-90</td> <td>94.1</td> <td>30.6-208</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Female</td> <td>16-18</td> <td>291</td> <td>190-429</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> <p>備註：Tanner stages 男孩9-14歲平均12歲，女孩8-12歲平均11歲；在台灣男孩的平均青春期約為14歲，女孩約為12歲</p>			IGF-1 Pediatric Reference Ranges				IGF-1 Adult Reference Ranges			IGF-1 Tanner Stage Reference Ranges				Gender	Age (y)	Median	Central 95% Range	Age (y)	Median	Central 95% Range	Gender	Tanner Stage	Median	Central 95% Range	Male	0-3	44	<15.0-129	19-21	207	117-323	Male	1	144	63.2-271	Male	4-6	96	22.0-208	22-24	175	98.7-289	Male	2	240	114-411	Male	7-9	132	40.1-255	25-29	160	83.6-259	Male	3	298	166-510	Male	10-11	177	68.7-316	30-34	136	71.2-234	Male	4	290	170-456	Male	12-13	305	143-506	35-39	126	63.4-223	Male	5	257	161-384	Male	14-15	322	177-507	40-44	122	58.2-219	Female	1	186	71.4-394	Male	16-18	284	173-414	45-49	120	53.3-215	Female	2	288	122-508	Female	0-3	68	18.2-172	50-54	108	48.1-209	Female	3	329	164-545	Female	4-6	105	35.4-232	55-59	108	44.7-210	Female	4	319	174-480	Female	7-9	139	56.9-277	60-64	112	43.0-220	Female	5	274	169-400	Female	10-11	248	118-448	65-69	110	40.2-225					Female	12-13	323	170-527	70-79	92	35.1-216					Female	14-15	317	191-496	80-90	94.1	30.6-208					Female	16-18	291	190-429							
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臨床意義	<p>IGF-1 主要是由肝臟製造的 polypeptide，經由血液運送，到達目標後與細胞膜受體結合，刺激正常細胞的生長與繁殖。IGF-1 影響葡萄糖的代謝，IGF-1 受到 GH 活性的影響，因此使用 GH 治療時，可以偵測 IGF-1，例如對成人補充 GH、對侏儒症 GH 治療，都可以使用 IGF-I 觀察治療效果，當快速生長最有效果時，IGF-1 數據最高。IGF-1 也被用來評估肢端肥大症嚴重的程度。</p> <p>IGF-1 上升於肢端肥大症，糖尿病視網膜病變，腦下垂體機能亢進，肥胖，巨人症，青春期早熟，懷孕。</p> <p>IGF-1 下降於神經性厭食，肝硬化，慢性疾病，糖尿病，侏儒症，腦下垂體機能不足，停經後，GH 缺損，甲狀腺機能亢進，營養不良。IGF-I 也正確反應 GH 的分泌，下降於 GH 不足時。</p>																																																																																																																																																																																		
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