System	Investigation	Age to Start	Frequency
Iron Load	1. Serum Ferritin 2. Liver MRI 3. Cardiac MRI	• Pre-Transfusion	<ol> <li>q 3 months</li> <li>q 6-24 months</li> <li>q 6-24 months</li> </ol>
Chelation associated	Refer to table 5 for chelator specific side effects and monitoring		
Liver Function	Liver enzymes	• Pre-Transfusion	q 3 months
Cardiac Function	<ol> <li>Physical Examination</li> <li>Echo, MUGA scan or T2*MRI Holter PRN</li> </ol>	• At diagnosis	1. q 6 months 2. Annually
Endocrine Function	<ol> <li>Growth chart, sitting and standing height</li> <li>Hypogonagism (Puberty staging)</li> <li>Hypothyrodism (TSH)</li> <li>Hpoparathyrodism (Ca, PO4, PTH)</li> <li>Diabetes (OGTT, Fructosamine if available)</li> </ol>	<ul><li>At diagnosis</li><li>10 years</li><li>10 years</li><li>10 years</li><li>10 years</li></ul>	<ol> <li>q 6 months until reached final growth?</li> <li>Annually until complete puberty</li> <li>Annually</li> <li>Annually</li> <li>Annually</li> <li>Annually</li> <li>Annually</li> </ol>
Bone	Ostepenia/Osteoporosis (DEXA scan)	• 10 years	1. q 3-5 years
Infections	<ol> <li>Hepatitis B sAg, sAb</li> <li>Hepatitis C serology</li> <li>HIV serology</li> </ol>	• Pre-Transfusion	1. q 2-3 years

 $\hbox{$^*$ unless ferritin is low, serum ferritin monitoring is indicated every month}\\$ 

Table 6: Recommended Monitoring for Complications of  $\boldsymbol{\beta}$  Thalassemia