Patient Enrollment Criteria & Cohort groupings

Cohort	Age Range	Inclusion	Exclusion
<6 Registry	Age≥1 thru <6	 A child with LCPD with onset of symptoms* related to the hip between the ages of 1-6 years old. Waldenstrom stages I, II or IIIa 	 Children not meeting one or more of the inclusion criteria. Children with previous surgery on the affected hip. Children with any of the following underlying causes to AVN: Hemoglobinopathy Endocrine dysfunction Treated with oral or IV steroids or chemotherapy for >30 consecutive days Previous history of congenital or acquired hip disease (i.e DDH, traumatic dislocation/fracture) with the exception of transient synovitis Any form of skeletal dysplasia Down syndrome Coagulopathy Hemophilia Leukemia Sickle cell disease
6-8 Early Stage	Age ≥6 thru <8	 A child with LCPD with onset of symptoms related to the hip between the ages of 6-8 years old. Waldenstrom stages I or IIa Perfusion MRI 	
8-11 Early Stage	Age ≥8 thru <11	 A child with LCPD with onset of symptoms related to the hip between the ages of 8-11 years old. Waldenstrom stages I or IIa Perfusion MRI 	
Late Stage	Age ≥6 thru <11	 A child with LCPD with onset of symptoms related to the hip between the ages of 6 and 11 years old. Waldenstrom stages IIb or IIIa Maximum abduction x-ray 	
>11 Registry	Age≥11	 A child with LCPD, or secondary femoral head osteonecrosis due to trauma or corticosteroid therapy, with onset of symptoms related to the hip after 11 years of age. Waldenstrom stages I, II (Perfusion MRI) OR Waldenstrom stage IIIa (Max Abduction x-ray) 	 Children not meeting one or more of the inclusion criteria. Children with previous hip surgery on the affected hip.

^{*}Note: If date of onset of symptoms is not available, we will use the date of diagnosis to determine their age cohort.