Bifurcating Artery - Mesh

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Problem Specification

- 1. Pre-Analysis & Start-Up
- 2. Geometry
- 3. Mesh
- 4. Physics Setup
- 5. Numerical Solution
- 6. Numerical Results
- 7. Verification & Validation

Exercises

Comments

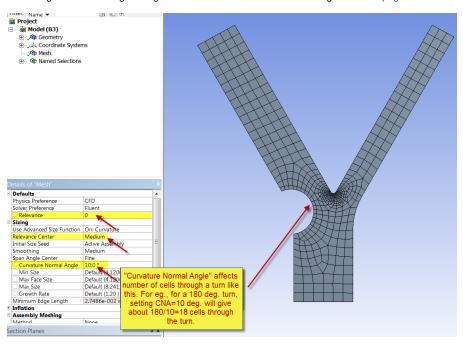
Mesh

Some of the settings you can use to get a better mesh are shown in the figure below.

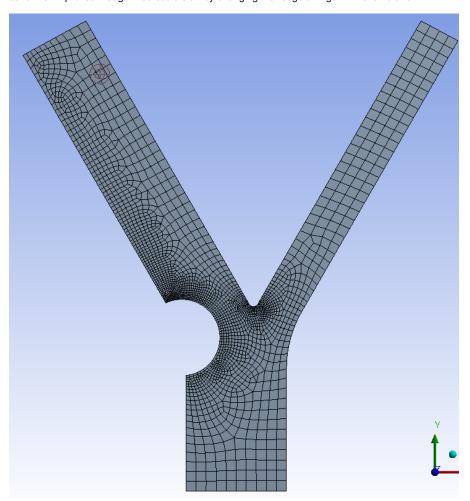
• The Relevance Center can be set to coarse, medium and fine. After you pick the Relevance Center, you can change the Relevance from -100 to 100, with 100 being the finest within the particular relevance center.

You can insert a sizing for faces and edges along with the mesh settings in the figure.

You can give a bias to edge sizing to cluster cells towards one end of edge. See this page for how to implement a bias to an edge.



Below is a mesh we obtained by playing with these settings. This mesh resolves the separated flow behind the plaque better than the default mesh. It can be further improved though! You could start by changing the "edge sizings" in the left branch.



Go to Step 4: Physics Setup

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