3D Bifurcating Artery (steady) - Numerical Solution

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Numerical Solution

Reference Values:

The drag is calculated by integrating the shear and pressure at the wall. The drag coefficient is then calculated by non-dimensionalizing the drag. The reference entities used in the non-dimensionalization are defined in the Reference Values panel in Fluent. Note that the "Reference Values" will not change your solution for the velocity and pressure at the cell centers. It will affect only the drag coefficient and any other non-dimensional quantities calculated from the solution.

If you have used SpaceClaim to create the geometry, refer to the steps below for Total Surface Area

1. Open Spaceclaim Measure Mass Properties
2. Note the Total Surface Area

Summary of Reference Values:

Parameter	Input Value
Area(m^2)	0.001324
Density(kg/m^3)	1060
Velocity (m/s)	0.315

Numerical Solution:

Watch the following video for demonstrations:

Go to Step 6: Numerical Results

Go to all FLUENT Learning Modules