Data for Figure 4:

|  |  |
| --- | --- |
| Figure 4a: Dual-syringe | Figure 4a: Single-Injection |
| t\_DS,vrms\_DS,sem\_DS | t\_SI,vrms\_SI,sem\_SI |
| 1.6667e-06,24.396,4.29480.16667,24.485,1.86140.33333,18.809,6.62380.5,21.275,4.9370.66667,23.093,5.67590.83334,23.936,5.32251,25.392,6.57491.1667,24.969,11.0921.3333,18.562,7.03911.5,23.099,8.2531.6667,23.309,5.72931.8333,17.676,6.76262,21.238,2.88732.1667,23.14,3.89192.3333,21.733,5.94572.5,18.493,2.12682.6667,20.386,4.93322.8333,19.683,3.88373,16.783,2.75013.1667,18.335,6.77013.3333,17.872,7.23073.5,18.501,4.44923.6667,18.103,5.42383.8333,19.92,6.99784,19.034,5.9694.1667,19.291,8.11944.3333,17.496,7.34324.5,21.59,3.49734.6667,22.86,7.6974.8333,23.552,7.48455,21.578,5.2415.1667,23.596,6.15275.3333,21.892,2.77995.5,21.415,2.36365.6667,21.153,4.49345.8333,20.539,3.43386,19.749,5.02566.1667,19.649,1.43196.3333,15.978,3.24916.5,20.205,4.75926.6667,17.948,4.03336.8333,19.585,4.59817,19.898,7.29857.1667,17.378,4.87777.3333,17.939,5.97587.5,16.712,4.49497.6667,19.447,7.24577.8333,19.639,4.91818,20.58,5.8598.1667,19.416,6.58668.3333,15.604,4.91338.5,17.132,4.71618.6667,17.545,4.22838.8333,20.215,6.14339,19.048,6.43789.1667,18.731,3.78499.3333,18.33,4.13519.5,16.641,4.11439.6667,18.169,6.17089.8333,18.519,4.325310,19.205,3.15610.167,17.192,4.332610.333,19.687,4.638110.5,17.973,5.097210.667,20.195,4.812610.833,17.6,3.196711,20.012,6.424111.167,18.318,5.434611.333,20.684,8.204911.5,22.232,6.137811.667,21.616,5.216811.833,21.103,4.59512,24.626,4.496612.167,23.19,6.723112.333,20.619,3.24212.5,19.271,6.2512.667,20.209,2.925512.833,20.989,5.829313,19.593,7.13913.167,20.093,6.874513.333,16.345,5.429213.5,15.247,4.800313.667,16.522,5.2313.833,17.782,5.953214,15.228,5.537614.167,19.545,6.189414.333,20.493,7.284314.5,22.797,4.495114.667,17.32,6.637214.833,17.709,5.064315,19.934,7.4689 | 1.6667e-06,26.672,12.3850.16667,24.678,9.31330.33333,26.221,7.09940.5,27.442,7.61660.66667,26.182,5.01340.83334,28.759,5.69831,24.238,3.54921.1667,25.767,5.25831.3333,27.814,5.74991.5,28.131,6.30981.6667,25.521,5.78191.8333,23.409,4.50662,24.372,4.91662.1667,22.507,7.30142.3333,23.567,4.66862.5,24.399,5.73272.6667,26.139,5.6762.8333,21.633,3.71953,24.453,3.71813.1667,25.245,5.89173.3333,24.593,5.30783.5,25.07,5.96083.6667,25.139,4.78093.8333,27.647,7.27514,25.101,4.64994.1667,23.791,6.1844.3333,20.115,3.7764.5,24.306,4.12514.6667,22.334,4.66644.8333,21.499,6.38925,20.02,4.1195.1667,21.179,3.0925.3333,23.014,5.43345.5,22.066,2.73875.6667,20.959,3.15115.8333,20.981,4.8296,23.02,4.82686.1667,20.233,4.13096.3333,18.898,3.46956.5,18.883,1.71176.6667,17.912,3.47036.8333,18.915,5.03817,21.076,1.48987.1667,18.893,3.88217.3333,22.128,7.587.5,20.825,4.80337.6667,20.793,3.78127.8333,20.378,8.74678,23.125,0.961488.1667,21.168,4.81298.3333,19.8,2.79528.5,19.13,1.88978.6667,18.452,4.71988.8333,20.026,4.00919,21.27,2.54699.1667,21.084,1.99259.3333,22.508,1.74149.5,20.526,2.67739.6667,19.574,5.40549.8333,20.803,5.280310,23.165,2.138610.167,19.753,2.272510.333,17.144,5.814710.5,18.235,5.442610.667,18.711,3.98710.833,23.65,0.6370311,19.421,5.987311.167,20.004,4.3311.333,20.294,6.018811.5,18.742,4.8411.667,20.159,7.651911.833,21.798,7.463612,19.352,3.468412.167,21.148,3.869812.333,17.397,5.293512.5,18.541,5.017212.667,19.698,4.548812.833,21.042,3.454313,19.705,1.653713.167,17.753,4.260113.333,20.774,2.859313.5,18.946,3.130713.667,19.894,4.285813.833,19.43,5.193414,18.369,3.904714.167,19.037,3.27514.333,21.086,1.667814.5,21.689,2.223814.667,23.388,2.222714.833,24.011,0.09361515,21.047,6.4477 |

Figure 4d: Mean flow speed (mfs) comparison

 SI - single injection

 DS - dual syringe

 mfs\_SI,mfs\_DS

22.667,14.09

7.81,20.94

13.83,23.94

13.74,20.94

20.76,6.5

15.71,19.63

Figure 4e: Backflow fraction (bff) comparison

 SI - single injection

 DS - dual syringe

 bff\_SI,bff\_DS

0.061234,0.27714

0.15539,0.085151

0.20291,0.37079

0.36142,0.09499

0.41266,0.41372

0.39185,0.2075