

Data and Programs for Replication

Note to researchers: The proprietary price and quantity data used in this paper was obtained from the Millennium Research Group, a medical device market research firm that has since been acquired by Decision Resources Group, and we are prohibited from sharing the data directly. However, the data set is available for purchase – it is based on their *MarketTrack* product and can be purchased through that sales team. We would be happy to assist any researchers interested in obtaining the data.

Creating data files for analysis:

create_ClinicalTrialsData.do

* Imports hand collected clinical trials data from **ClinicalTrialData_2018_Clean.xlsx**, and saves file ready for analysis as **ClinicalTrialData.dta**

Master_Data.do

* calls **clean_EUdata_agg.do**, **clean_EUdata_h.do**, **create_EUdata.do** to create **EUdata_h.csv** and **EUdata_agg.csv** for analysis (and analogous US data sets)

Model estimation and counterfactuals:

Master_Estimation.do

* brings in EU hospital and aggregate data via **ImportData_fcn.m**
* estimates demand via **fcn_Estimate_Demand.m** and subfunctions called therein, and reports parameters for **Table 2**
* estimates supply via **fcn_Estimate_Supply.m** and subfunctions
* computes results for **Table 3** using **fcn_Counterfactual_PartialEqRisk.m** and subfunctions

Master_Cfcl_Tc.do

* imports data and parameter estimates and computes counterfactual scenarios for various trial length requirements (Tc)
* recomputed at various scenarios via **XX.sh** to generate **Tables 3** and **A6**

RI_cfcls_obslearn.sh

* calls **Master_Counterfactuals_ObsLearn.do** and **Master_Counterfactuals_Optimality_ObsLearn.do** to compute optimal trial lengths for various rates of post market learning to generate **Figures 5** and **A14**

Cfcl_bootstrap_robustness

* contains shell scripts and slightly modified code to recompute counterfactuals at various scenarios via to generate **Tables 3** and **A6**

Additional files to create figures and tables:

Figures_EUnotinUS.do creates:

- * **Figure 1(b)** graphic **fig_EUnotinUS.pdf**

Figures_AgeVsUsage.do creates:

- * **Figure 2** graphics and regressions for table below
- * **Figure A5** graphics and regressions for table below

sum_ClinicalTrialsData.do and **sum_ClinicalTrialsData_Qj.do** creates:

- * **Figure 1(a)** top panel of table
- * **Figure 3(a)** graphic
- * **Figure A1** graphic

Figures_Qj_TechChange.do creates:

- * **Figure 3(b)** graphic

Figures_Cfcl_OptimalTc_USspillovers.do creates:

- * **Figure 4** graphics
- * **Figure A13(b-d)** graphics

Figures_Cfcl_ObsLearn.do creates:

- * **Figure 5** graphics
- * **Figure A14** graphics

Figures_IndividualProductLearning.do creates:

- * **Figure A2** graphics and statistics for table below

Figures_CoStar.do creates:

- * **Figure A3** graphic

Balloons folder set of files cleans PTCA balloon data and creates:

- * **Figure A4** graphic and table below

Figures_AsymInfo.do creates:

- * **Figure A6** graphics and table below
- * **Figure A7** graphics

Figures_moreEUvsUScomps.do creates:

- * **Figure A8** graphics
- * **Figure A9** graphics

Figures_aFEvsNN.do creates:

- * **Figure A10** graphics

Figures_EpiQj1.do creates:

- * **Figure A11** graphics

* **Figure A13(a)** graphic

create_EUdata.do creates:

* **Figure A12** graphics (lifetime profits)