**Program Directory**

**Project:** CALIBER Statins and Colorectal Cancer (case-control)

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**Updated**: November 2019

Note: Uses linked primary (CPRD), hospital (HES), mortality (ONS), and Index of Multiple Deprivation (IMD) data

*Main directory*: ucl/programs/bdickerman (unless otherwise noted)

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| **Data Creation** | |
| Primary analysis |  |
| Raw data 🡪 Expand 2 | /Data/ **step1\_expand2\_23Jul2019\_statin\_linked\_main.sas** |
| Expand 2 🡪 Expand 3  (add events, censoring) | /Data/ **step2\_expand3\_24Jul19\_statin\_linked\_main.sas** |
| Clean  (Create clean datasets for dynamic strategies) | /Analysis/Statin\_CRC\_Caco/clean/~  **clean\_statin\_linked\_crc.sas**  **clean\_statin\_linked\_allcausedeath.sas** |
| Location of final datasets (cohort) | /UCL/data/bdickerman/ Statin\_CRC\_Caco/Final/~  **crc\_statin\_linked\_final.sas7bdat**  **death\_statin\_linked\_final.sas7bdat** |
| **Data Analysis** | |
| Primary analysis |  |
| Table 1 (target trial specification, emulation) | N/A |
| Table 2 (baseline characteristics) | *Cohort:*  /Analysis/Statin\_CRC\_Caco/clean/**clean\_statin\_linked\_crc.sas**  (within the cleaning program)  *Case-control:*  /Analysis/Statin\_CRC\_Caco/**analysis\_statin\_alt\_poynter\_v4.sas**  (within the program where incidence density sampling is performed) |
| Table 3 (primary analyses) | *Emulating a target trial:*  /Analysis/Statin\_CRC\_Caco/  Cohort ITT HR: **analysis\_statin\_linked\_crc\_emulate\_cohort\_itt\_hr.sas**  Cohort ITT RD: **analysis\_statin\_linked\_crc\_emulate\_cohort\_itt\_rd.sas**  Cohort PP HR: **analysis\_statin\_linked\_crc\_emulate\_cohort\_pp1\_hr.sas**  Cohort PP RD: **analysis\_statin\_linked\_crc\_emulate\_cohort\_pp1\_rd.sas**  Case-control ITT: **analysis\_statin\_alt\_poynter\_v4.sas**  Case-control PP HR: **analysis\_statin\_linked\_crc\_emulate\_caco\_pp1\_hr\_new.sas** (see section Approach 3)  *Replicating the approach of a previous observational study:*  /Analysis/Statin\_CRC\_Caco/  **analysis\_statin\_alt\_poynter\_v4.sas**  **analysis\_statin\_linked\_crc\_replicate\_3lag\_cohort\_itt\_rd.sas** |
| Figure 2 (exposure distribution among cases and controls) | /Analysis/Statin\_CRC\_Caco/  **analysis\_statin\_alt\_poynter\_v4.sas** |
| Alternative outcome: All-cause mortality | |
| Appendix Table 3 | /Analysis/Statin\_CRC\_Caco/deathoutcome/ **analysis\_statin\_alt\_poynter\_v4\_death\_v2.sas** |
| Sensitivity analysis (additional adjusting for LTF with IPCW) | |
| Methods Text, Appendix Text | /Analysis/Statin\_CRC\_Caco/sens/  **analysis\_statin\_linked\_crc\_emulate\_cohort\_itt\_hr\_sens\_ipcw.sas**  **analysis\_statin\_linked\_crc\_emulate\_cohort\_pp1\_hr\_sens\_ipcw.sas** |
| Sensitivity analysis (lag 6 months) | |
| Results Text, Appendix Table 2 | /Analysis/Statin\_CRC\_Caco/  **analysis\_statin\_alt\_poynter\_v4.sas** |
| Sensitivity analysis (additionally adjusting for cancer screening past year, when emulating a target trial [cohort]) | |
| Results Text | /Analysis/Statin\_CRC\_Caco/  **analysis\_statin\_linked\_crc\_emulate\_cohort\_itt\_hr\_screenadj.sas**  **analysis\_statin\_linked\_crc\_emulate\_cohort\_pp1\_hr\_screenadj.sas** |
| Sensitivity analysis (age-adjusted HRs when emulating a target trial [cohort]) | |
| Results Text | /Analysis/Statin\_CRC\_Caco/  **analysis\_statin\_linked\_crc\_emulate\_cohort\_itt\_hr\_ageadj.sas**  **analysis\_statin\_linked\_crc\_emulate\_cohort\_pp1\_hr\_ageadj\_new.sas** |
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