Data supplement to McCrea et al. Initiation and duration of selective serotonin reuptake inhibitor prescribing over time: UK cohort study. Br J Psychiatry doi: 10.1192/bjp.bp.115.166975

## Online Supplement DS1

Potential impact of including people with a 'first' SSRI prescription shortly after newly registering with a general practice

In our primary analysis we excluded prescribing episodes with a first prescription before the start of follow up or less than 365 days after the individual registered with their practice. However, during the review process a question was raised to whether this potentially may bias the study findings.

Below we evaluate the potential impact of adding people with a 'first' SSRI prescription shortly after newly registering with a general practice on our estimates of the rate of new SSRI prescriptions per 100 person years at risk. We base this evaluation on information about the overall proportion of newly registered patients and the proportion of these patients receiving a 'first' SSRI prescription.

## Proportion of newly registered patients

THIN includes information about the date that patients registered with a general practice. From this information we identified the proportion of newly registered patients within each calendar year. We found that *on average* 7.3% of the individuals on the practice patient lists were newly registered in any given year of the study period.

## Proportion newly registered patients receiving a 'first' SSRI prescription since registration

Of the newly registered patients we examined how many received a 'first' SSRI prescription within each month since they registered. We found that there were 22% who received a SSRI prescription in the first month and 9% in the second month, but after 3 months this levelled off and around 3-4% received a first SSRI prescription. This suggests that prescriptions issued in the first 3 months were prescriptions that were carried over from a previous general practice. However, we cannot exclude that there may be some individuals who have specifically registered with a new general practice in order to initiate SSRI treatment.

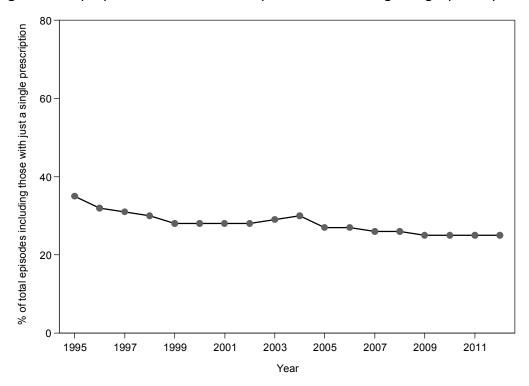
Impact of including people with a 'first' SSRI prescription shortly after registration on the estimates of the rate of new SSRI prescriptions per 100 person years at risk.

If we assume the 'true' rate of first prescribing of SSRIs in newly registered patients was 3-4% and we were to include these individuals in our analyses, the overall estimates of first SSRI prescription is likely to increase slightly. However, the overall patterns would remain the same. For example, if the overall estimate of the rate of first prescription is 2 per 100 years of follow-up in those who were already on the patient list adding information from the newly registered individuals would increase the overall estimate to 2.1 per 100 person years of follow-up (Table DS1).

**Table DS1**: An example to illustrate the impact of including people in the first year of registration into the estimates of the rate of new SSRI prescriptions per 100 person years at risk.

	Proportion of	Proportion of patients	
	patients (%) on	receiving a first	Rate of first
	patient list	prescription of SSRI	prescription
Newly registered individuals	7.3	3.5	0.26
Already registered individuals	92.7	2	1.85
Total	100		2.11

Fig. DS1 The proportion of all new SSRI episodes constituting a single prescription



**Fig. DS2** Overall rates of initiation of SSRI. The upper line includes all new SSRI prescriptions. The lower line includes data from the primary analysis (i.e. excluded those who received just one prescription).

