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| **Topic** | **SSRIs / SNRIs and medicines known to increase risk of bleeding** |
| Title | Patients prescribed a selective serotonin reuptake inhibitor (SSRI) or a selective noradrenaline reuptake inhibitor (SNRI) concurrently with other medicines known to increase the risk of bleeding |
| Description | Number of patients (all ages, aged 17 or under, 18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, 65 to 74, 75 to 84 and 85 or over) prescribed a SSRI or SNRI and concurrently prescribed, in the same reporting period, 2, 3 or 4 (or more) unique medicines (chemical substances) that may increase the risk of a bleed as a percentage of patients prescribed an SSRI/SNRI in the same reporting period. |
| Numerator | Number of patients (all ages, aged 17 or under, 18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, 65 to 74, 75 to 84 and 85 or over) prescribed a SSRI or SNRI (group 1) and concurrently prescribed, in the same reporting period, 2, 3 or 4 (or more) unique medicines (chemical substances) from groups 2, 3, 4 or 5. |
| **Group 1: SSRIs / SNRIs**   |  |  | | --- | --- | | **BNF Chemical Substance** | **BNF Chemical**  **Substance Code** | | Citalopram hydrobromide | 0403030D0 | | Citalopram hydrochloride | 0403030Z0 | | Escitalopram | 0403030X0 | | Fluoxetine hydrochloride | 0403030E0 | | Fluvoxamine maleate | 0403030L0 | | Paroxetine hydrochloride | 0403030P0 | | Sertraline hydrochloride | 0403030Q0 | | Duloxetine hydrochloride | 0403040Y0 | | Levomilnacipran | 0403040AA | | Reboxetine | 0403040U0 | | Venlafaxine | 0403040W0 | | Vortioxetine | 0403040AB | | Duloxetine hydrochloride | 0704020AA | | Dapoxetine hydrochloride | 0704060A0 | |
| AND prescribed 2, 3 or 4 (or more) unique medicines (chemical substances) from any of the following groups of medicines |
| **Group 2: Non-steroidal anti-inflammatory drugs (NSAIDs)**   |  |  | | --- | --- | | **BNF Paragraph** | **BNF Code** | | Non-Steroidal Anti-Inflammatory Drugs | 100101 | |
| **Group 3: Oral anticoagulants**   |  |  | | --- | --- | | **BNF Chemical Substance** | **BNF Code** | | Acenocoumarol | 0208020H0 | | Apixaban | 0208020Z0 | | Dabigatran etexilate | 0208020X0 | | Edoxaban | 0208020AA | | Phenindione | 0208020N0 | | Rivaroxaban | 0208020Y0 | | Warfarin sodium | 0208020V0 | |
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| **Group 4: Anti-platelet drugs**   |  |  | | --- | --- | | **BNF Chemical Substance** | **BNF Code** | | Aspirin | 0209000A0 | | Clopidogrel | 0209000C0 | | Dipyridamole | 0209000L0 | | Dipyridamole and aspirin | 0209000V0 | | Prasugrel | 0209000Y0 | | Ticagrelor | 0209000Z0 | |
| **Group 5: Other aspirin containing medicines**   |  |  | | --- | --- | | **BNF Chemical Substance** | **BNF Code** | | Aspirin | 0407010B0 | | Aspirin and caffeine | 0407010AA | | Aspirin and papaveretum | 0407010A0 | | Aspirin and paracetamol | 0407010S0 | | Aspirin combined preparations | 0407010W0 | | Bisoprolol fumarate/aspirin | 0204000AC | | Co-codaprin (Codeine phosphate/aspirin) | 0407010M0 | | Isosorbide mononitrate with aspirin | 0206010W0 | |
| Denominator | Number of patients (all ages, aged 17 or under, 18 to 24, 25 to 34, 35 to 44, 45 to 54, 55 to 64, 65 to 74, 75 to 84 and 85 or over) prescribed a SSRI or SNRI (group 1) in the same reporting period. |
| Rationale / Comments | SSRIs have been shown to inhibit reuptake of serotonin in platelets, impairing platelet aggregation. A wide variety of studies have examined increased bleeding risk with the use of SSRIs alone or in combination with other agents which increases risk. Although fewer studies examining the effects of SNRIs on bleeding risk exist, it is logical to expect SNRIs to affect bleeding risk to some extent.  BNF advises “caution with concomitant use of drugs that increase risk of bleeding”  Corticosteroids have been excluded from the comparator. Whilst it is acknowledged that they may increase the risk of bleeding it is also recognised that prescribing may be acute or intermittent. Due to the time lag in the data, including corticosteroids in the comparator would result in the inclusion of some patients who are not currently prescribed corticosteroids. A method of including corticosteroids will be explored with a view to possibly including in a future comparator.    By considering patients prescribed a SSRI or SNRI and concurrently prescribed 2, 3 or 4 (or more) unique medicines (chemical substances from groups 2, 3, 4 and 5) there is a possibility that two (or more) unique medicines may be from the same grouping.   1. Clinically this is a justifiable possibility within group 4 e.g. dipyridamole and aspirin 2. However statistically there is the potential for an anomaly in that dipyridamole & aspirin (combined) will be counted as one medicine whereas dipyridamole and aspirin prescribed separately will be counted as two medicines. 3. Practically patients may reach the threshold for inclusion because medicines were switched during the reporting period. E.g. switch from naproxen to ibuprofen will be counted as two medicines when most likely they were only taking one NSAID. |

List created 22 September 2020

