**Suppl 1. The detailed search strategy for each electronic database.**

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| **Central line through PubMed** | | | |
| Domain searched | Serial | Search strategy | Results |
| [Title/Abstract] | #1 | (“Metformin” OR “Dimethylbiguanidine” OR “Dimethylguanylguanidine” OR “Glucophage” OR “Glumetza” OR “ Fortamet” OR “Riomet”) |  |
| [Title/Abstract] | #2 | (“Stroke\*” OR “Cerebrovascular Accident\*” OR “Vascular Accident\*” OR “CVA”) |  |
| [Title/Abstract] | #3 | #1 AND #2 | 463 |

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| --- | --- | --- | --- |
| **WOS** | | | |
| Domain searched | Serial | Search strategy | Results |
| Topic | #1 | (“Metformin” OR “Dimethylbiguanidine” OR “Dimethylguanylguanidine” OR “Glucophage” OR “Glumetza” OR “Fortamet” OR “Riomet”) AND (“Stroke\*” OR “Cerebrovascular Accident\*” OR “Vascular Accident\*” OR “CVA”) | 426 |

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| --- | --- | --- | --- |
| **Cochrane** | | | |
| Domain searched | Serial | Search strategy | Results |
| Article Title, Abstract and Keywords | #1 | (“Metformin ” OR “Dimethylbiguanidine” OR “Dimethylguanylguanidine” OR “Glucophage” OR “Glumetza” OR “ Fortamet” OR “Riomet”) AND (“Stroke\*” OR “Cerebrovascular Accident\*” OR “Vascular Accident\*” OR “CVA”) | 270 |

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| --- | --- | --- | --- |
| Embase | | | |
| Domain searched | Serial | Search strategy | Results |
| Article Title, Abstract and Keywords | #1 | (“Metformin” OR “Dimethylbiguanidine” OR “Dimethylguanylguanidine” OR “Glucophage” OR “Glumetza” OR “Fortamet” OR “Riomet”) AND  (“Stroke\*” OR “Cerebrovascular Accident\*” OR “Vascular Accident\*” OR “CVA”) | 904 |