

| Table S1. Evolving definitions of Type 2 Myocardial Infarction. |  |
|---|--|
| Year  | Universal Definition of Type 2 Myocardial Infarction   |
| 2007  | Myocardial infarction secondary to ischaemia due to either increased oxygen demand or decreased supply, e.g. coronary artery spasm, coronary embolism, anaemia, arrhythmias, hypotension or hypertension   |
| 2012  | Instances of myocardial injury with necrosis where a condition other than coronary artery disease contributes to an imbalance between myocardial oxygen supply and/or demand e.g. coronary artery spasm, coronary embolism, anaemia, arrhythmias, hypotension or hypertension  |
| 2018  | Detection of a rise and/or fall of cTn values with at least one value above the 99th percentile URL, and evidence of an imbalance between myocardial oxygen supply and demand unrelated to coronary thrombosis, requiring at least one of the following: <ul style="list-style-type: none"> <li>- Symptoms of acute myocardial ischaemia</li> <li>- New ischaemic ECG changes</li> <li>- Development of pathological Q waves</li> <li>- Imaging evidence of new loss of viable myocardium or new regional wall motion abnormality in a pattern consistent with an ischaemic aetiology</li> </ul> |

| Table S2. Search strategy.  |  |
|---|--|
| MEDLINE: (type 2 adj3 myocard*) OR (type-2 adj3 myocard*) OR (type II adj3 myocard*) OR (type-II adj3 myocard*) OR (type 2 adj3 MI) OR (type-2 adj3 MI) OR T2MI OR (supply demand adj3 myocard*)                                |  |
| EMBASE: ('type 2' NEXT/3 myocard*) OR ('type-2' NEXT/3 myocard*) OR ('type ii' NEXT/3 myocard*) OR ('type-ii' NEXT/3 myocard*) OR ('type 2' NEXT/3 mi) OR ('type-2' NEXT/3 mi) OR ('t2mi') OR ('supply demand' NEXT/3 myocard*) |  |

| Author, Year                | Patients |      | Design        | Definition of MI | Geographic location | Screening                                    | Troponin Assay  |
|-----------------------------|----------|------|---------------|------------------|---------------------|--|-----------------|
|                             | T1MI     | T2MI |               |                  |                     |  |                 |
| Arora, 2018 (1)             | 775      | 264  | Retrospective | 2012             | USA                 | NSTEMI patients                              | cTnI            |
| Balanescu, 2020 (2)         | 152      | 49   | Retrospective | 2018             | USA                 | AMI patients                                 | N/A             |
| Baron, 2016 (3)             | 40501    | 1313 | Prospective   | 2007             | Sweden              | AMI patients                                 | hs-cTnT         |
| Bonaca, 2012 (4)            | 359      | 42   | Prospective   | 2007             | Multinational       | TRITON TIMI 38 trial                         | N/A             |
| Cediel, 2017 (5)            | 376      | 194  | Retrospective | 2012             | Spain               | ED patients with at least 1 troponin         | cTnI            |
| Chapman, 2018 (6)           | 1171     | 429  | Prospective   | 2012             | UK                  | ED with elevated troponin                    | cTnI            |
| Chapman, 2020 (7)           | 4981     | 1121 | Prospective   | 2018             | UK                  | Suspected ACS                                | cTnI            |
| Consuegra-Sanchaz, 2018 (8) | 125      | 75   | Retrospective | 2012             | Spain               | ED patients with at least 1 troponin         | cTnI<br>hs-cTnT |
| El-Haddad, 2012 (9)         | 512      | 295  | Retrospective | 2012             | USA                 | Patients with elevated troponin              | N/A             |
| Etaher, 2020 (10)           | 97       | 121  | Prospective   | 2018             | Australia           | Patients with elevated troponin              | N/A             |
| Furie, 2019 (11)            | 349      | 206  | Retrospective | 2012             | Israel              | NSTEMI on general ward                       | Unknown         |
| Guimaraes, 2018 (12)        | 847      | 76   | Retrospective | 2012             | Multinational       | ACS during TRACER trial                      | N/A             |
| Hawatmeh, 2020 (13)         | 664      | 281  | Retrospective | 2012             | USA                 | NSTEMI patients                              | cTnI            |
| Higuchi, 2019 (14)          | 12023    | 491  | Retrospective | 2012             | Tokyo               | Admitted to CCU                              | N/A             |
| Javed, 2009 (15)            | 143      | 64   | Retrospective | 2007             | USA                 | Patients with elevated troponin              | cTnI            |
| Kadesjo, 2019 (16)          | 1111     | 251  | Retrospective | 2018             | Sweden              | MI, Registry                                 | N/A             |
| Lambrecht, 2018 (17)        | 360      | 119  | Prospective   | 2007             | Denmark             | Hospitalised patients with troponin measured | cTnI            |
| Landes, 2016 (18)           | 107      | 107  | Retrospective | 2012             | Israel              | Diagnosed with T2MI and T1MI                 | cTnT            |
| Lopez-Cuenca, 2016 (19)     | 707      | 117  | Retrospective | 2012             | Spain               | Diagnosed with T2MI and T1MI                 | hs-cTnT         |
| Meigher, 2016 (20)          | 340      | 452  | Retrospective | 2012             | Germany             | ED patients with elevated troponin           | cTnI            |
| Nestelberger, 2017 (21)     | 684      | 128  | Prospective   | 2012             | Multinational       | ED patients with MI                          | N/A             |
| Neumann, 2017 (22)          | 188      | 99   | Prospective   | 2012             | Germany             | ED patients with suspected MI                | hs-cTnI         |

|   |       |      |               |      |             |  |      |
|---|-------|------|---------------|------|-------------|--|------|
| Paiva, 2015 (23)  | 764   | 236  | Retrospective | 2012 | Portugal    | Admitted to CCU with MI                      | cTnI |
| Pandey, 2020 (24)   | 97    | 103  | Prospective   | 2018 | USA         | MI   | N/A  |
| Putot, 2018 (25)  | 2036  | 847  | Prospective   | 2012 | France      | ED or cardiology ward with elevated troponin | cTnI |
| Putot, 2019 (26)  | 365   | 254  | Retrospective | 2018 | France      | Hospitalised patients with CAD               | cTnI |
| Putot, 2020 (27)  | 3710  | 862  | Retrospective | 2012 | France      | Hospitalised patients with MI                | cTnI |
| Radovanovic, 2017 (28)  | 13828 | 1091 | Retrospective | 2012 | Switzerland | Diagnosed AMI                                | N/A  |
| Raphael, 2020 (29)  | 1365  | 1054 | Retrospective | 2018 | USA         | Raised troponin                              | cTnT |
| Reed, 2017 (30)   | 88    | 162  | Retrospective | 2012 | USA         | Underwent vascular surgery procedure         | cTnT |
| Saaby 2013 (31)   | 397   | 144  | Prospective   | 2007 | Denmark     | Troponin measured                            | cTnI |
| Saaby, 2014 (32)  | 360   | 119  | Prospective   | 2007 | Denmark     | Elevated troponin                            | cTnI |
| Sandoval, 2014 (33)   | 66    | 190  | Retrospective | 2012 | USA         | ED patients with troponin measured           | cTnI |
| Sandoval, 2017 (34)   | 77    | 140  | Prospective   | 2012 | USA         | ED patients with troponin measured           | cTnI |
| Sato, 2020 (35)   | 2834  | 155  | Prospective   | 2012 | Japan       | Hospitalised patient with MI                 | N/A  |
| Shah, 2015 (36)   | 1171  | 429  | Prospective   | 2012 | UK          | Admitted with elevated troponin              | cTnI |
| Singh, 2020 (37)  | 2097  | 1225 | Retrospective | 2018 | USA         | Age <50, MI or raised troponin               | N/A  |
| Smilowitz, 2018 (38)  | 137   | 146  | Prospective   | 2012 | USA         | Admitted with raised troponin                | cTnI |
| Stein, 2014 (39)  | 2691  | 127  | Prospective   | 2007 | Israel      | Admitted to cardiology                       | N/A  |
| Truong, 2020 (40)   | 275   | 175  | Retrospective | 2012 | Russia      | MI, undergoing angiogram                     | N/A  |
| <i>cTnI = cardiac troponin I; cTnT = cardiac troponin T; hs- = high sensitivity; AMI = acute myocardial infarction; MI = myocardial infarction; ACS = acute coronary syndrome; NSTEMI = non-ST elevation myocardial infarction; CCU = coronary care unit; CAD = coronary artery disease</i> |       |      |               |      |             |  |      |

| Table S3b. Study characteristics |          |      |                         |          |                |                 |            |           |
|----------------------------------|----------|------|-------------------------|----------|----------------|-----------------|------------|-----------|
| Author, Year                     | Patients |      | Variables               |          |                |                 |            |           |
|                                  | T1MI     | T2MI | Pre-existing conditions | Symptoms | Investigations | Troponin Values | Management | Prognosis |
| Arora, 2018 (1)                  | 775      | 264  | X                       |          | X              | X               | X          | X         |
| Balanescu, 2020 (2)              | 152      | 49   |                         | X        | X              |                 | X          |           |
| Baron, 2016 (3)                  | 40501    | 1313 | X                       | X        | X              | X               | X          |           |
| Bonaca, 2012 (4)                 | 359      | 42   |                         |          |                |                 |            |           |
| Cediel, 2017 (5)                 | 376      | 194  | X                       | X        | X              | X               |            | X         |
| Chapman, 2018 (6)                | 1171     | 429  | X                       |          | X              | X               | X          | X         |
| Chapman, 2020 (7)                | 4981     | 1121 | X                       | X        | X              | X               |            | X         |
| Consuegra-Sanchaz, 2018 (8)      | 125      | 75   | X                       | X        | X              | X               |            |           |
| El-Haddad, 2012 (9)              | 512      | 295  |                         |          |                |                 |            | X         |
| Etaher, 2020 (10)                | 97       | 121  | X                       |          | X              |                 | X          |           |
| Furie, 2019 (11)                 | 349      | 206  | X                       | X        | X              | X               | X          | X         |
| Guimaraes, 2018 (12)             | 847      | 76   | X                       |          | X              |                 | X          | X         |
| Hawatmeh, 2020 (13)              | 664      | 281  | X                       |          | X              | X               | X          |           |
| Higuchi, 2019 (14)               | 12023    | 491  | X                       |          | X              |                 | X          | X         |
| Javed, 2009 (15)                 | 143      | 64   | X                       |          | X              | X               |            | X         |
| Kadesjo, 2019 (16)               | 1111     | 251  | X                       |          |                |                 | X          | X         |
| Lambrecht, 2018 (17)             | 360      | 119  | X                       |          | X              | X               |            | X         |
| Landes, 2016 (18)                | 107      | 107  | X                       | X        | X              | X               |            |           |
| Lopez-Cuenca, 2016 (19)          | 707      | 117  | X                       | X        | X              | X               | X          | X         |
| Meigher, 2016 (20)               | 340      | 452  | X                       | X        | X              | X               |            | X         |
| Nestelberger, 2017 (21)          | 684      | 128  | X                       |          | X              |                 | X          | X         |
| Neumann, 2017 (22)               | 188      | 99   | X                       |          | X              | X               |            | X         |
| Paiva, 2015 (23)                 | 764      | 236  | X                       |          | X              | X               |            | X         |
| Pandey, 2020 (24)                | 97       | 103  | X                       |          |                |                 |            |           |
| Putot, 2018 (25)                 | 2036     | 847  | X                       |          | X              | X               |            | X         |
| Putot, 2019 (26)                 | 365      | 254  | X                       |          | X              | X               |            | X         |
| Putot, 2020 (27)                 | 3710     | 862  | X                       |          | X              | X               |            | X         |
| Radovanovic, 2017 (28)           | 13828    | 1091 | X                       |          | X              |                 | X          | X         |
| Raphael, 2020 (29)               | 1365     | 1054 | X                       |          | X              | X               | X          | X         |

|                      |      |      |   |   |   |   |   |   |
|----------------------|------|------|---|---|---|---|---|---|
| Reed, 2017 (30)      | 88   | 162  |   |   | X | X | X |   |
| Saaby 2013 (31)      | 397  | 144  | X |   | X | X |   |   |
| Saaby, 2014 (32)     | 360  | 119  | X |   | X | X | X | X |
| Sandoval, 2014 (33)  | 66   | 190  | X | X | X | X |   | X |
| Sandoval, 2017 (34)  | 77   | 140  | X | X | X | X | X | X |
| Sato, 2020 (35)      | 2834 | 155  | X |   | X |   | X | X |
| Shah, 2015 (36)      | 1171 | 429  | X | X | X | X | X | X |
| Singh, 2020 (37)     | 2097 | 1225 | X |   | X |   | X | X |
| Smilowitz, 2018 (38) | 137  | 146  | X | X | X | X | X | X |
| Stein, 2014 (39)     | 2691 | 127  | X | X | X |   | X | X |
| Truong, 2020 (40)    | 275  | 175  | X | X | X |   | X | X |
|                      |      |      |   |   |   |   |   |   |

| Table S4. Risk of bias assessment |                                  |                          |            |                  |                       |                  |
|-----------------------------------|----------------------------------|--------------------------|------------|------------------|-----------------------|------------------|
| Author, Year                      | Outcome                          |                          |            |                  |                       | Summary          |
|                                   | Representative of Exposed Cohort | Selection of Non-exposed | Assessment | Follow-up Length | Adequacy of Follow-Up |                  |
| Arora, 2018 (1)                   | x                                | x                        | x          | x                | x                     | 8 (good quality) |
| Balanescu, 2020 (2)               | 0                                | x                        | x          | 0                | x                     | 6 (fair quality) |
| Baron, 2016 (3)                   | x                                | x                        | x          | x                | x                     | 8 (good quality) |
| Bonaca, 2012 (4)                  | x                                | x                        | x          | x                | x                     | 8 (good quality) |
| Cediel, 2017 (5)                  | x                                | x                        | x          | x                | x                     | 8 (good quality) |
| Chapman, 2018 (6)                 | x                                | x                        | x          | x                | x                     | 8 (good quality) |
| Chapman, 2020 (7)                 | x                                | x                        | x          | x                | x                     | 8 (good quality) |
| Consuegra-Sanchaz, 2018 (8)       | 0                                | 0                        | x          | 0                | 0                     | 3 (poor quality) |
| El-Haddad, 2012 (9)               | x                                | x                        | 0          | 0                | 0                     | 5 (fair quality) |
| Etaher, 2020 (10)                 | x                                | x                        | x          | x                | x                     | 8 (good quality) |
| Furie, 2019 (11)                  | x                                | x                        | x          | x                | x                     | 8 (good quality) |
| Guimaraes, 2018 (12)              | 0                                | 0                        | x          | 0                | x                     | 4 (fair quality) |
| Hawatmeh, 2020 (13)               | 0                                | 0                        | x          | x                | 0                     | 4 (fair quality) |
| Higuchi, 2019 (14)                | 0                                | 0                        | x          | x                | x                     | 5 (fair quality) |
| Javed, 2009 (15)                  | x                                | x                        | x          | x                | x                     | 8 (good quality) |
| Kadesjo, 2019 (16)                | x                                | x                        | x          | x                | x                     | 8 (good quality) |
| Lambrecht, 2018 (17)              | x                                | x                        | x          | x                | x                     | 8 (good quality) |
| Landes, 2016 (18)                 | x                                | x                        | x          | x                | x                     | 8 (good quality) |
| Lopez-Cuenca, 2016 (19)           | x                                | x                        | x          | x                | x                     | 8 (good quality) |
| Meigher, 2016 (20)                | x                                | x                        | x          | x                | x                     | 8 (good quality) |
| Nestelberger, 2017 (21)           | x                                | x                        | x          | x                | x                     | 8 (good quality) |
| Neumann, 2017 (22)                | x                                | x                        | x          | x                | x                     | 8 (good quality) |

|                        |   |   |   |   |   |                  |
|------------------------|---|---|---|---|---|------------------|
| Paiva, 2015 (23)       | x | x | x | x | x | 8 (good quality) |
| Pandey, 2020 (24)      | 0 | 0 | 0 | 0 | 0 | 2 (poor quality) |
| Putot, 2018 (25)       | x | x | x | x | x | 8 (good quality) |
| Putot, 2019 (26)       | x | x | 0 | x | x | 7 (good quality) |
| Putot, 2020 (27)       | x | x | x | x | x | 8 (good quality) |
| Radovanovic, 2017 (28) | x | x | x | x | x | 8 (good quality) |
| Raphael, 2020 (29)     | x | x | x | x | x | 8 (good quality) |
| Reed, 2017 (30)        | x | x | x | x | x | 8 (good quality) |
| Saaby 2013 (31)        | x | x | x | x | x | 8 (good quality) |
| Saaby, 2014 (32)       | x | x | x | x | x | 8 (good quality) |
| Sandoval, 2014 (33)    | x | x | x | x | x | 8 (good quality) |
| Sandoval, 2017 (34)    | x | x | x | x | x | 8 (good quality) |
| Sato, 2020 (35)        | 0 | 0 | 0 | x | x | 2 (poor quality) |
| Shah, 2015 (36)        | x | x | x | x | x | 8 (good quality) |
| Singh, 2020 (37)       | 0 | 0 | x | x | x | 6 (fair quality) |
| Smilowitz, 2018 (38)   | x | x | x | x | x | 7 (good quality) |
| Stein, 2014 (39)       | x | x | x | x | x | 7 (good quality) |
| Truong, 2020 (40)      | x | x | x | x | x | 8 (good quality) |

| Table S5. Precipitating conditions for T2MI. |        |          |       |
|--|--------|----------|-------|
| Precipitating Factor                         | Events | Patients | %     |
| Sepsis                                       | 1116   | 3110     | 35.9% |
| Heart failure                                | 698    | 1943     | 35.9% |
| Arrhythmia                                   | 1716   | 5465     | 31.4% |
| Anaemia                                      | 1506   | 4878     | 30.9% |
| Valvular abnormality                         | 351    | 1301     | 27.0% |
| Respiratory failure                          | 743    | 3021     | 24.6% |
| Chronic obstructive pulmonary disease        | 59     | 258      | 22.9% |
| Stroke                                       | 44     | 328      | 13.4% |
| Hypertension                                 | 291    | 2217     | 13.1% |
| Non-cardiac surgery                          | 103    | 841      | 12.2% |
| Shock/hypotension                            | 291    | 3006     | 9.7%  |
| Renal failure                                | 51     | 553      | 9.2%  |
| Pulmonary oedema                             | 33     | 380      | 8.7%  |
| Bradycardia                                  | 35     | 484      | 7.2%  |
| Infection                                    | 115    | 2009     | 5.7%  |
| Coronary spasm                               | 36     | 1048     | 3.4%  |
| Bleeding                                     | 53     | 1834     | 2.9%  |
| Coronary endothelial dysfunction             | 1      | 592      | 0.2%  |



| Table S6. Clinical features on presentation in patients with T2MI versus T1MI patients.  |                                      |                          |       |                                      |                          |       |                          |
|--|--------------------------------------|--------------------------|-------|--------------------------------------|--------------------------|-------|--------------------------|
| Presenting Symptom   | T2MI                                 |                          |       | T1MI                                 |                          |       | Odds ratio *<br>[95% CI] |
|  | No. patients with presenting symptom | Total number of patients | %     | No. patients with presenting symptom | Total number of patients | %     |                          |
| Chest pain   | 3474                                 | 5932                     | 58.6% | 58273                                | 65883                    | 88.4% | 0.19 [0.13, 0.26]        |
| Dyspnoea   | 1412                                 | 5210                     | 27.1% | 6930                                 | 65129                    | 10.6% | 2.64 [1.86, 3.74]        |
| Arm or shoulder discomfort   | 28                                   | 330                      | 8.5%  | 50                                   | 143                      | 35.0% | 0.18 [0.11, 0.30]        |
| Jaw or neck discomfort   | 6                                    | 140                      | 4.3%  | 12                                   | 77                       | 15.6% | 0.24 [0.09, 0.68]        |
| Epigastric discomfort  | 8                                    | 140                      | 5.7%  | 8                                    | 77                       | 10.4% | 0.52 [0.19, 1.45]        |
| Nausea or vomiting   | 46                                   | 330                      | 13.9% | 39                                   | 143                      | 27.3% | 0.46 [0.28, 0.74]        |
| Fatigue  | 5                                    | 140                      | 3.6%  | 5                                    | 77                       | 6.5%  | 0.53 [0.15, 1.90]        |
| Diaphoresis  | 16                                   | 140                      | 11.4% | 16                                   | 77                       | 20.8% | 0.49 [0.23, 1.05]        |
| Other nonspecific symptoms   | 988                                  | 1529                     | 64.6% | 2662                                 | 41396                    | 6.4%  | 4.9 [0.48, 50.33]        |
| Collapse / syncope   | 99                                   | 2125                     | 4.7%  | 157                                  | 7152                     | 2.2%  | 2.10 [1.05, 4.18]        |
| *Comparing T2MI with T1MI patients, with odds ratio adjusted according to study weighting using random effects meta-analysis   |                                      |                          |       |                                      |                          |       |                          |
| Abbreviations: URL- upper reference limit; STEMI- ST elevation myocardial infarction; NSTEMI- Non- ST elevation myocardial infarction; MI- Myocardial infarction; cTn- cardiac troponin; T1MI- Type 1 myocardial infarction; T2MI- Type 2 myocardial infarction; ECG- electrocardiogram; CAD- coronary artery disease; PCI- percutaneous coronary intervention; CABG- coronary artery bypass graft; IHD- ischaemic heart disease; MACE- Major adverse cardiovascular events; CI- confidence interval |                                      |                          |       |                                      |                          |       |                          |

| Table S7. Cardiac investigations in patients with T2 MI versus T1MI.  |   |                    |       |   |                      |       |                         |
|---|---|--------------------|-------|---|----------------------|-------|-------------------------|
| Variable  | T2MI  |                    |       | T1MI  |                      |       | Odds ratio*<br>(95% CI) |
|   | No. patients with nominated diagnostic findings | Total no. patients | %     | No. patients with nominated diagnostic findings | Total no of patients | %     |                         |
| <b>ECG</b>  |   |                    |       |   |                      |       |                         |
| ST elevation  | 1129  | 8014               | 14.1% | 37182   | 84096                | 44.2% | 0.22 [0.17, 0.28]       |
| ST depression or T wave Inversion   | 1728  | 4911               | 35.2% | 10968   | 51042                | 21.5% | 1.36 [0.85, 2.17]       |
| Pathological Q Waves  | 30  | 447                | 6.7%  | 177   | 850                  | 20.8% | 0.38 [0.20, 0.71]       |
| Non-specific ST-T wave changes  | 146   | 592                | 24.7% | 45  | 417                  | 10.8% | 2.62 [1.81, 3.79]       |
| Left bundle branch block  | 175   | 1927               | 9.1%  | 1943  | 42543                | 4.6%  | 1.62 [1.21, 2.17]       |
| Atrial fibrillation/flutter   | 54  | 257                | 21%   | 52  | 784                  | 6.6%  | 4.99 [3.14, 7.93]       |
| <b>Echocardiograph</b>  |   |                    |       |   |                      |       |                         |
| Echocardiogram performed  | 648   | 1353               | 47.9% | 1571  | 2830                 | 55.5% | 0.44 [0.20, 0.96]       |
| Presence of RWMA  | 97  | 286                | 33.9% | 101   | 214                  | 47.2% | 0.48 [0.06, 3.78]       |
| <b>Angiogram</b>  |   |                    |       |   |                      |       |                         |
| Angiogram performed   | 3182  | 9318               | 34.1% | 42724   | 49944                | 85.5% | 0.09 [0.06, 0.12]       |
| Obstructive coronary artery disease present   | 1246  | 3663               | 34.0% | 19923   | 44404                | 44.9% | 0.16 [0.05, 0.54]       |
| Multivessel disease present   | 593   | 2147               | 27.6% | 11839   | 41715                | 28.4% | 0.40 [0.19, 0.82]       |
| *Comparing T2MI with T1MI patients, with odds ratio adjusted according to study weighting using random effects meta-analysis<br>ECG=electrocardiograph; RWMA=regional wall motion abnormalities; CI=confidence interval; T2MI=type 2 myocardial infarction; T1MI=type 1 myocardial infarction |   |                    |       |   |                      |       |                         |

Table S8. Troponin measurements.

| Troponin Measurement | Number of Studies | T1MI (min-max) | T2MI (min-max) |
|----------------------|-------------------|----------------|----------------|
| Baseline cTn (xULN)  | 12                | 0.14-190       | 0.1-8.2        |
| 6h cTn (xULN)        | 4                 | 13.2-142       | 4.25-11        |
| Peak cTn (xULN)      | 20                | 5.1-1703       | 2.8-447        |

Abbreviations: xULN= times upper limit normal

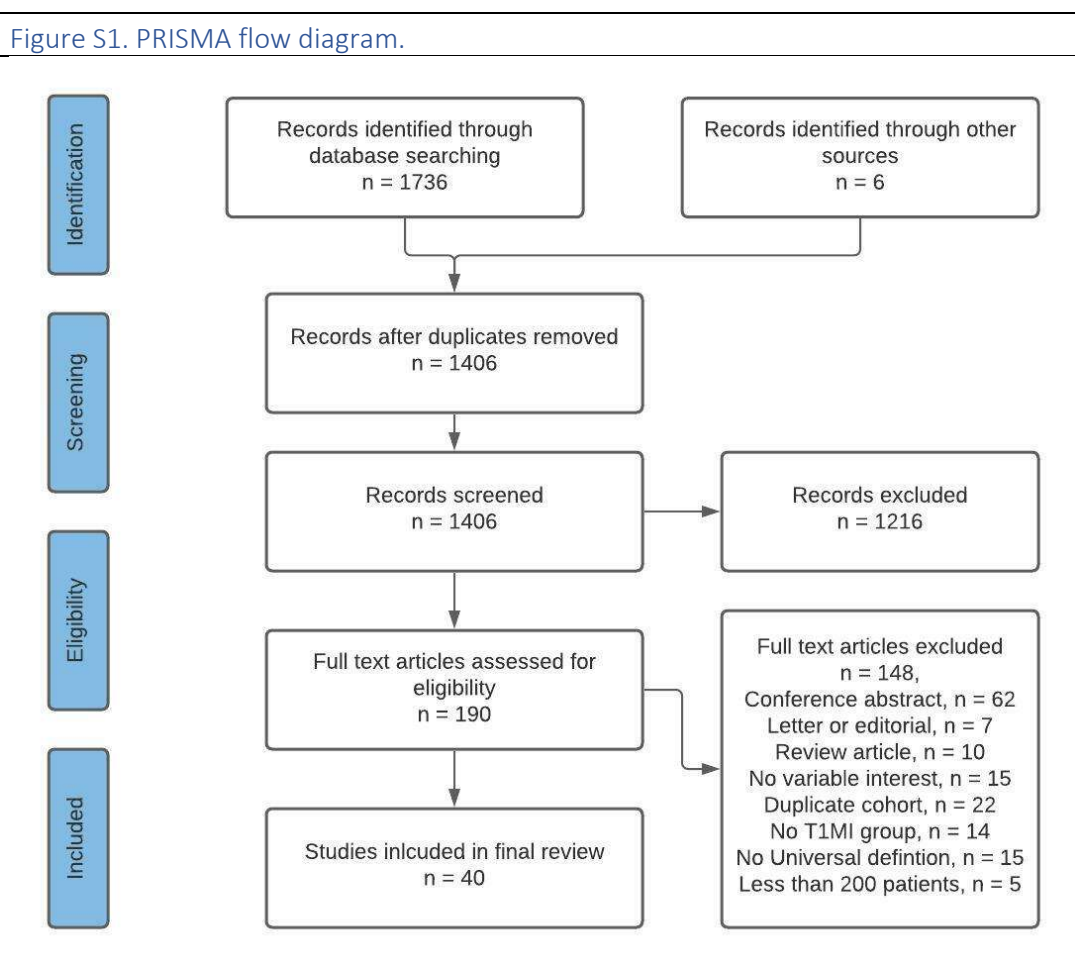


Figure S2. Forest Plot. Presence of Ischaemic Heart Disease.

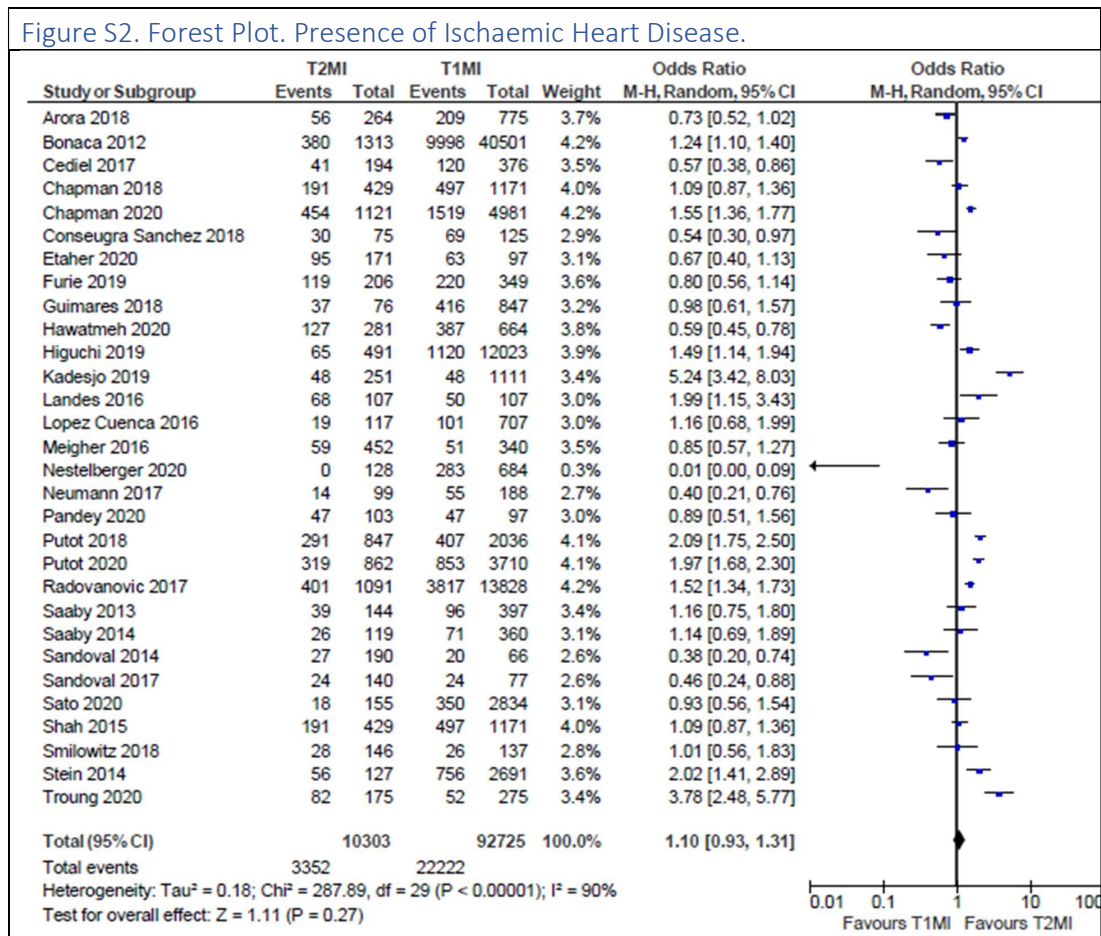


Figure S3. Forest Plot. Presence of Type 2 Diabetes Mellitus.

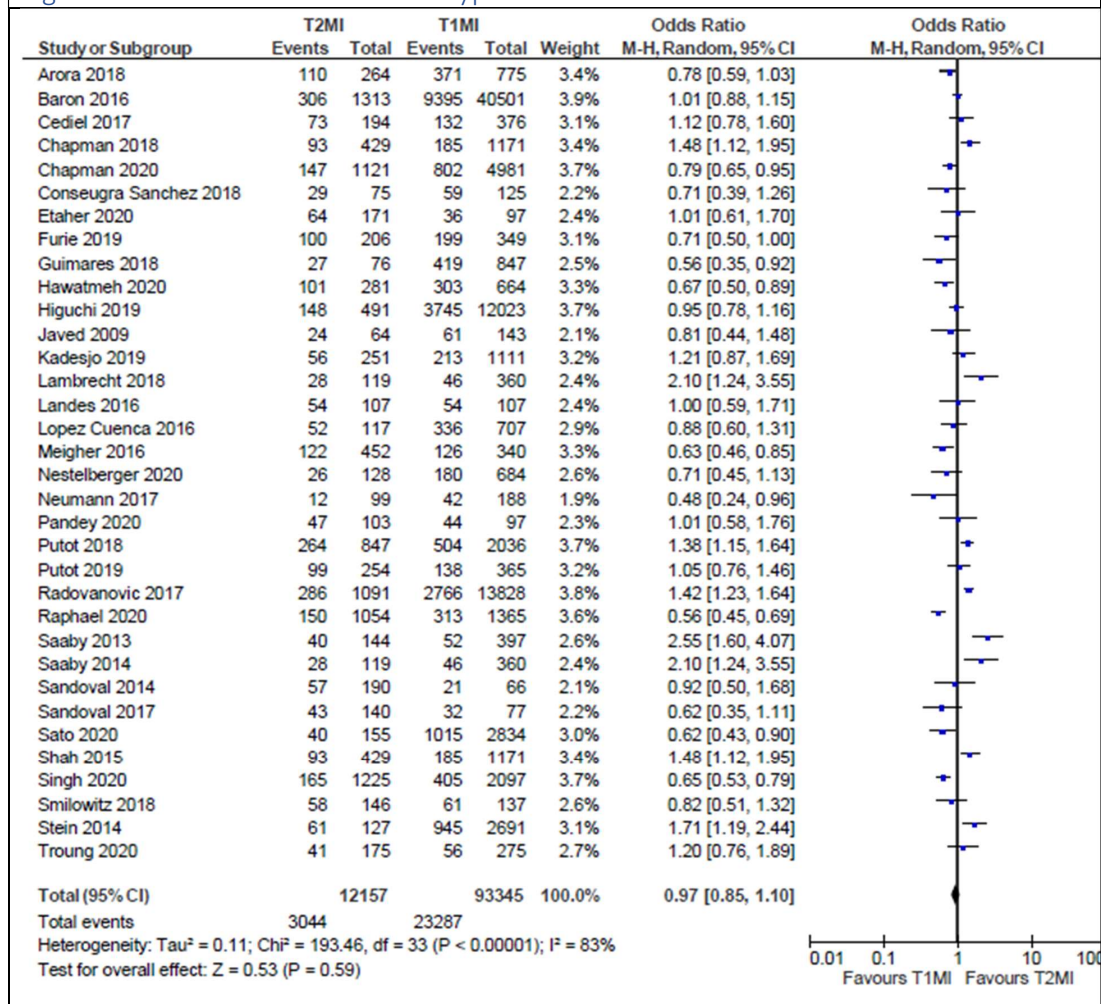


Figure S4. Forest Plot. Presence of Hypertension.

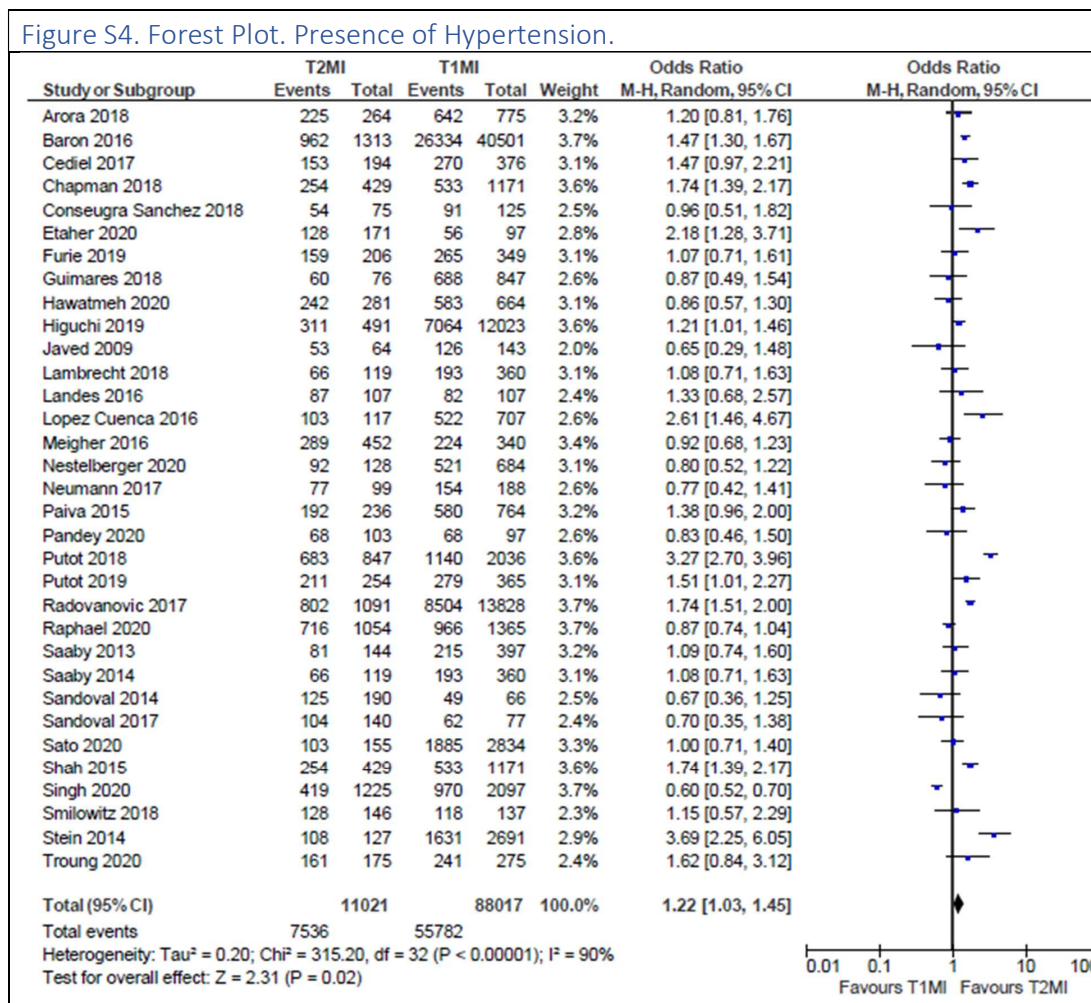


Figure S5. Forest Plot. Presence of Dyslipidaemia.

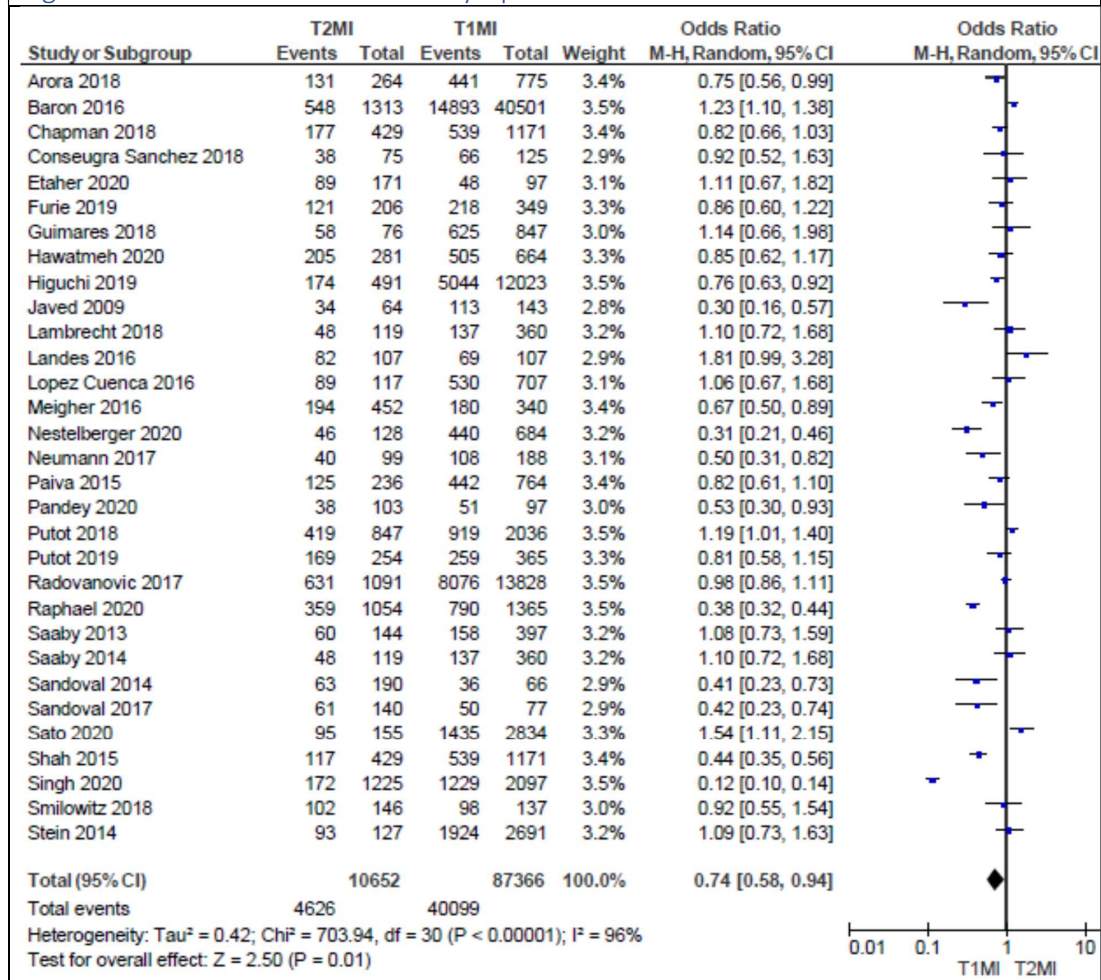


Figure S6. Forest Plot. Smoking Status.

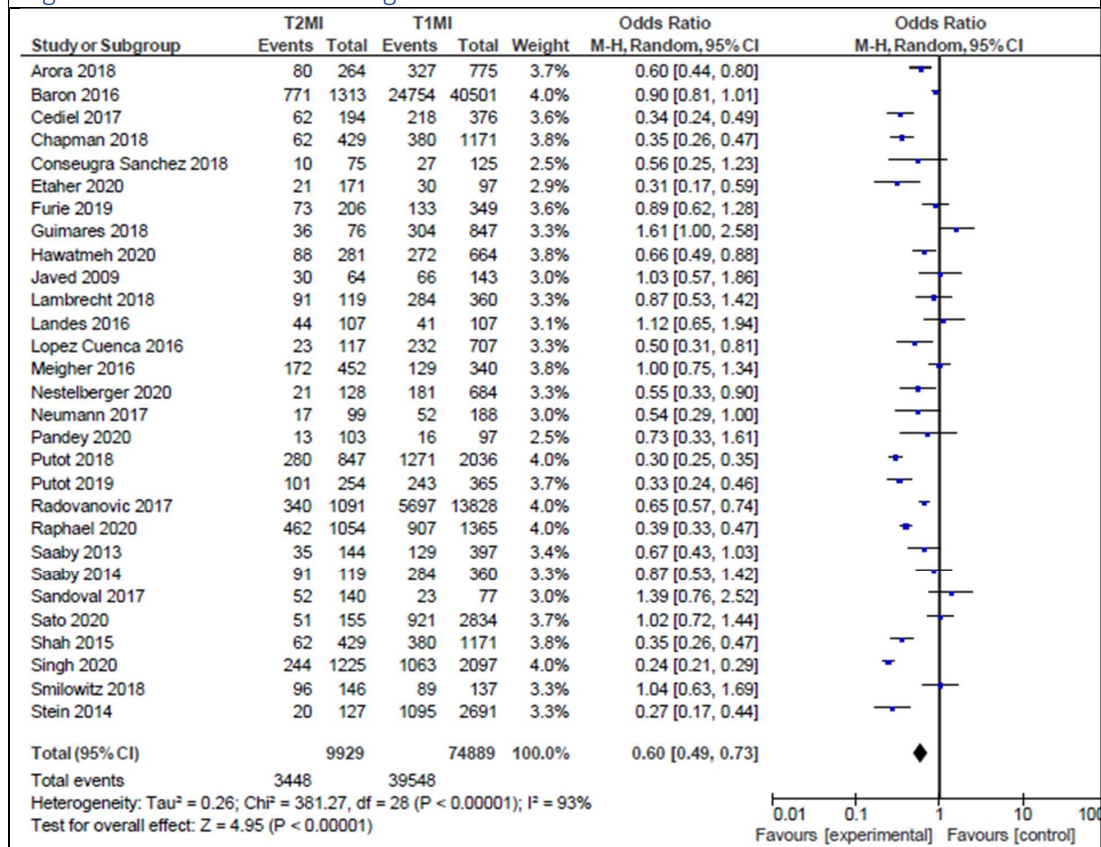
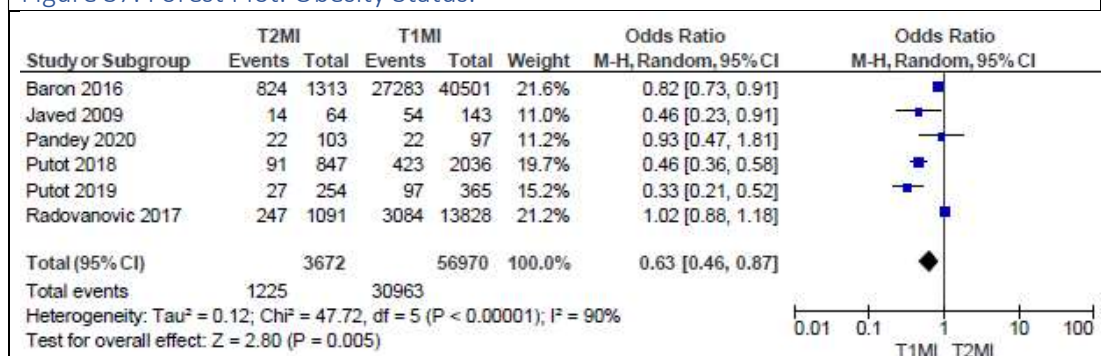


Figure S7. Forest Plot. Obesity Status.





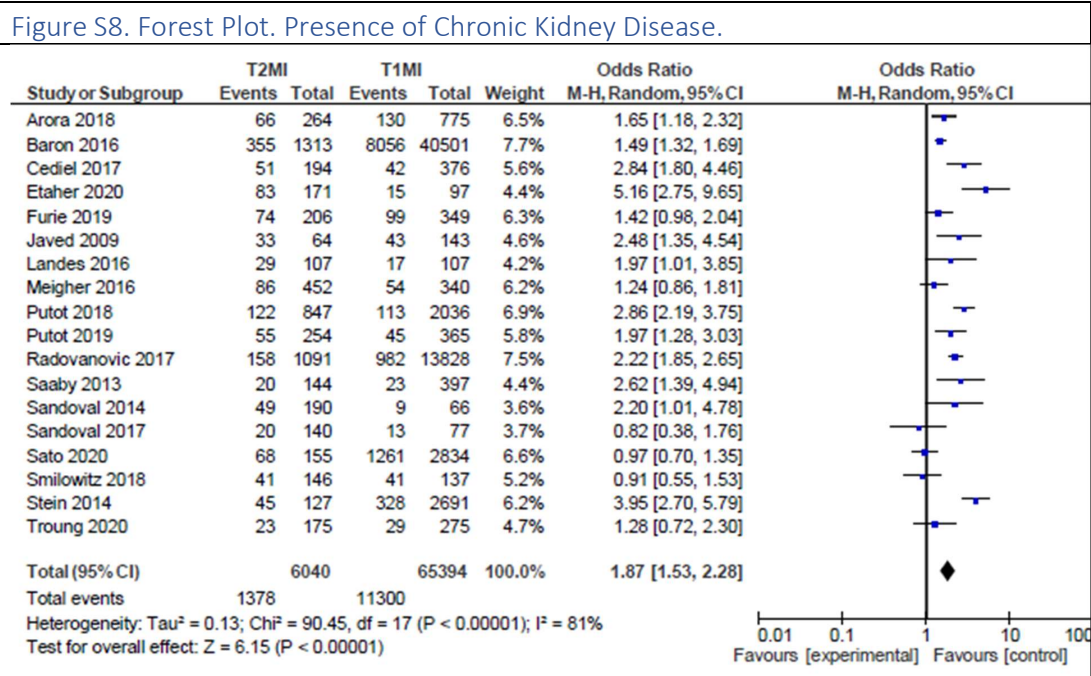
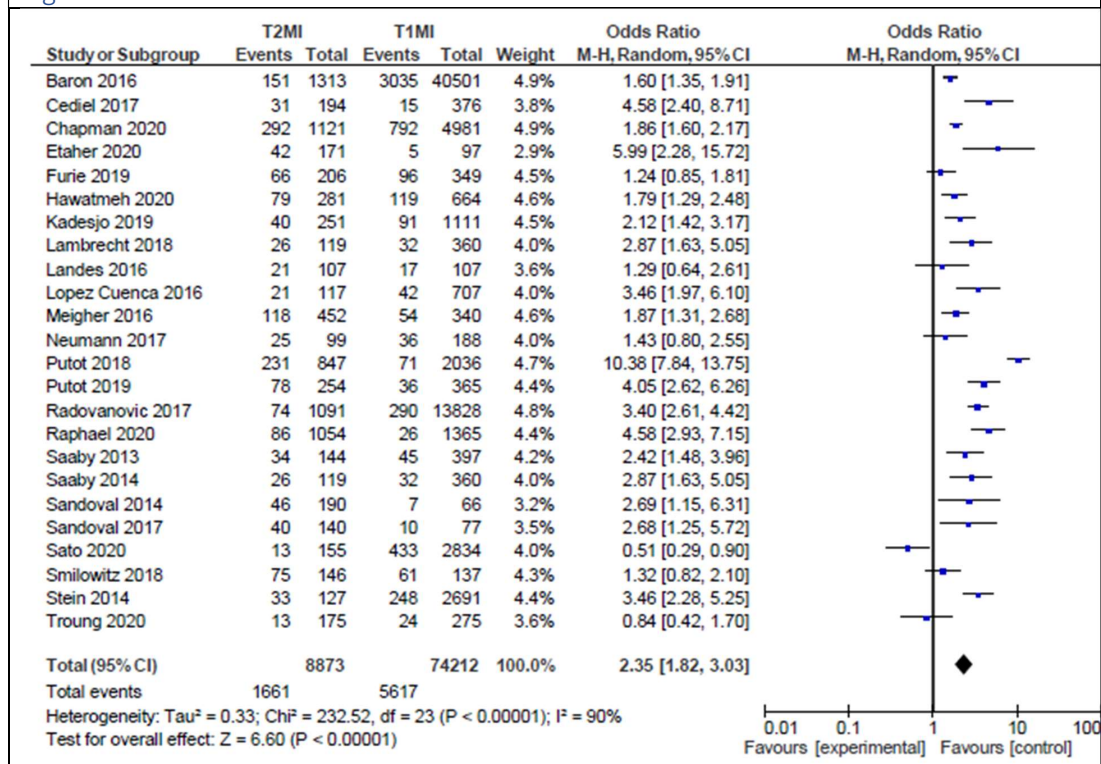
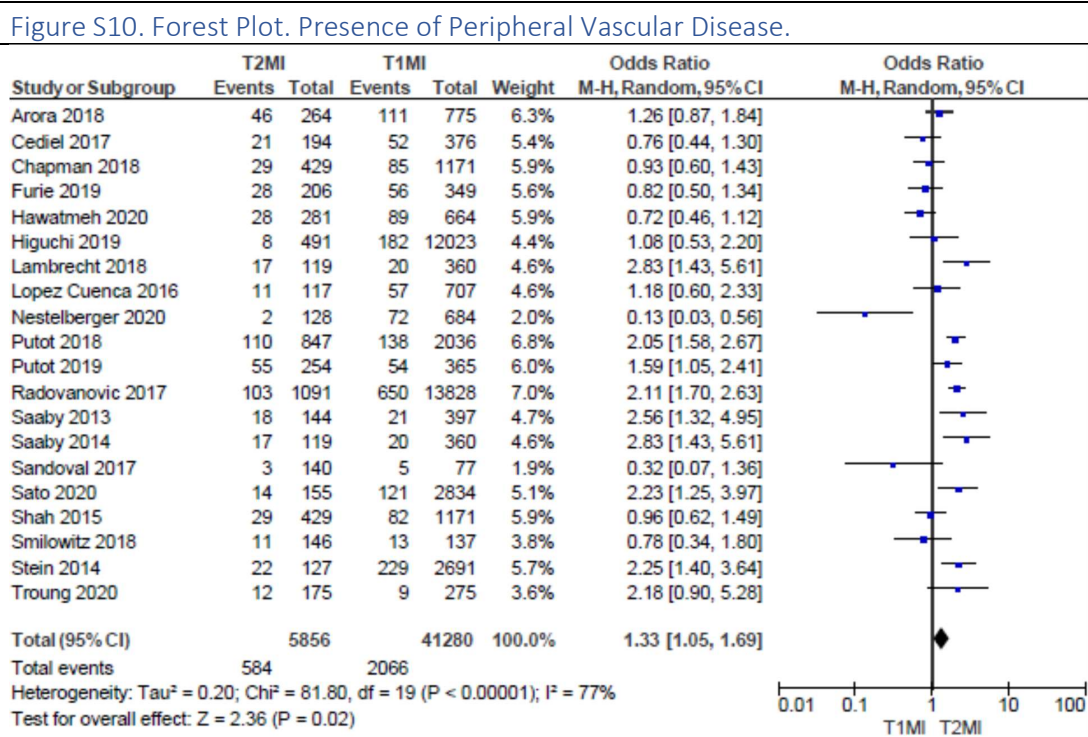


Figure S9. Forest Plot. Presence of Heart Failure.





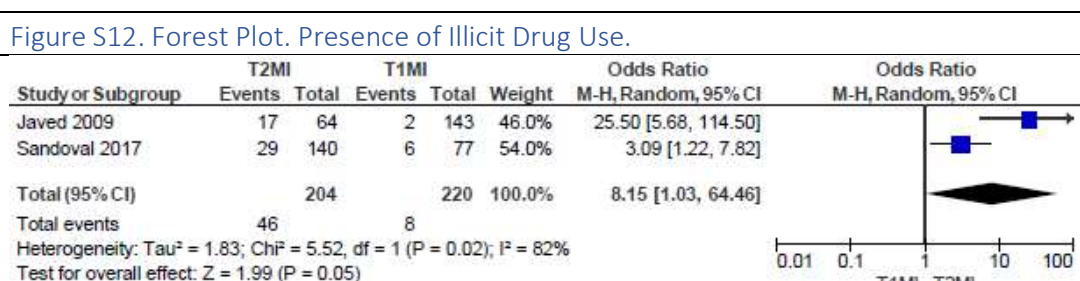
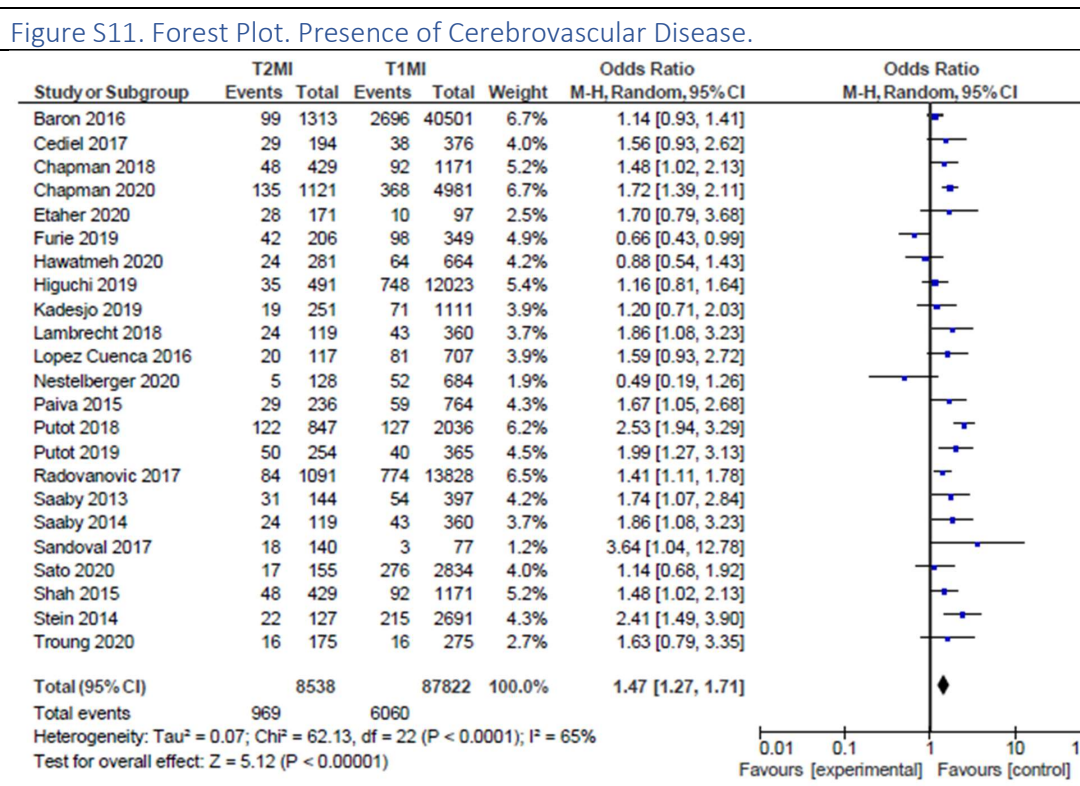


Figure S13. Forest Plot. Presence of Atrial Fibrillation.

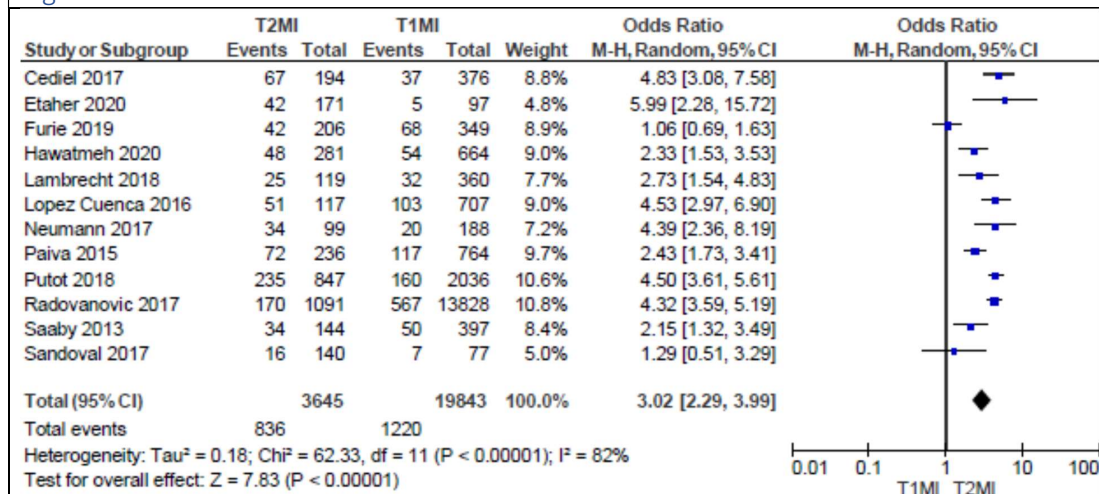


Figure S14. Forest Plot. Chest Pain as Presenting Feature.

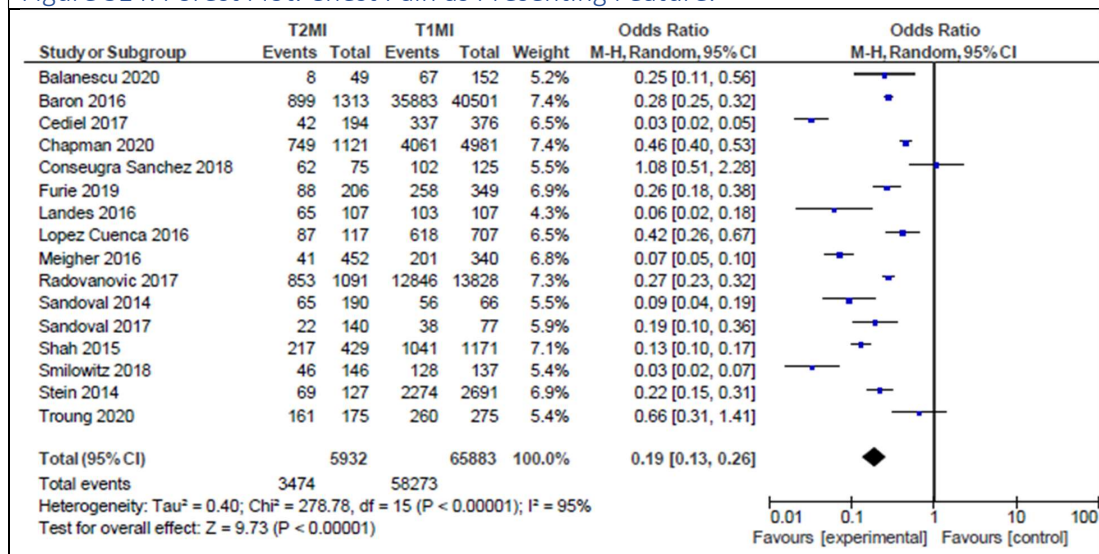


Figure S15. Forest Plot. Dyspnoea as Presenting Feature.

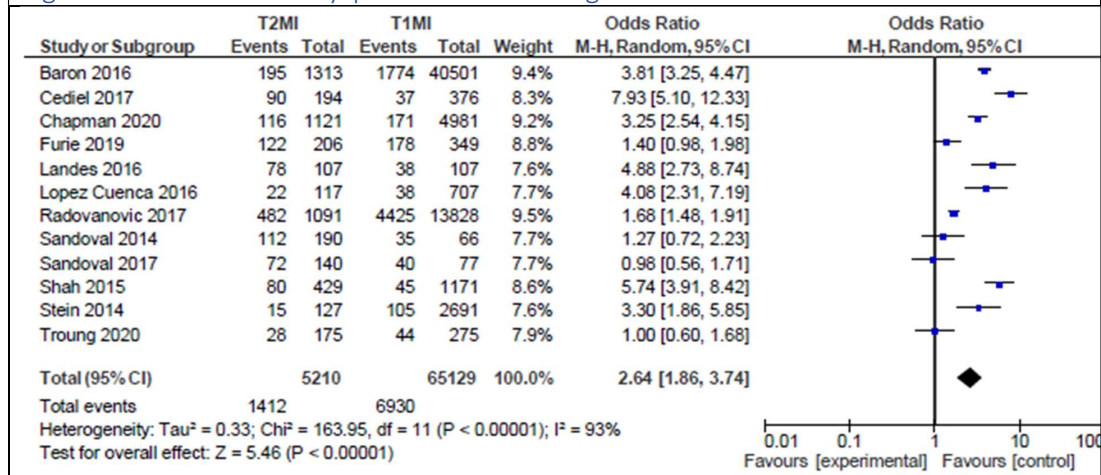


Figure S16. Forest Plot. Arm / Shoulder Discomfort as Presenting Feature.

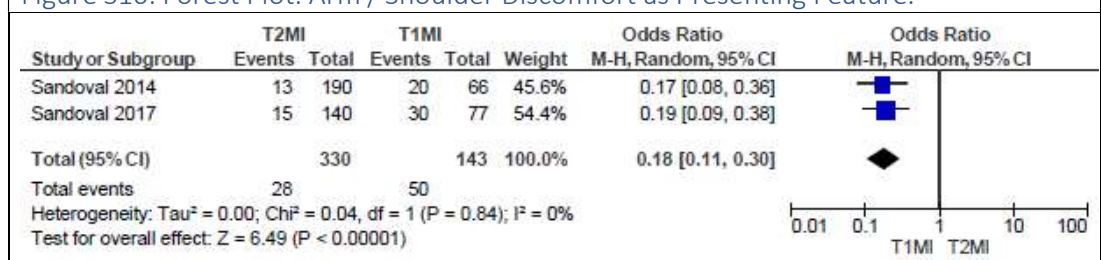


Figure S17. Forest Plot. Nausea / Vomiting as Presenting Feature.

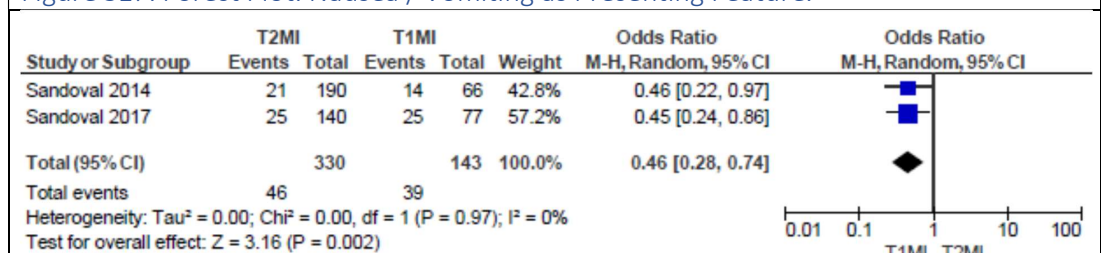


Figure S18. Forest Plot. Non-specific Symptoms as Presenting Features.

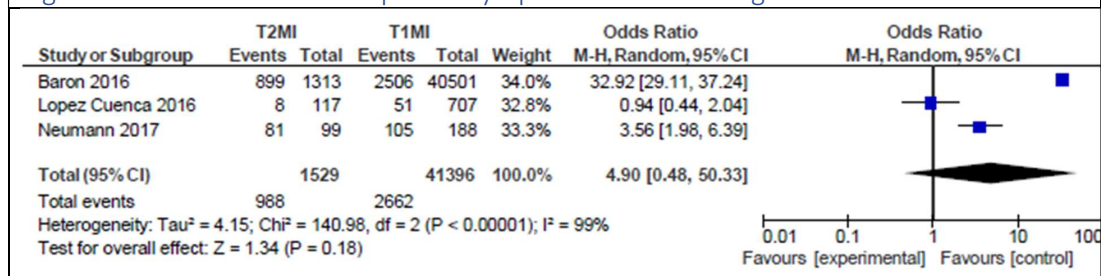


Figure S19. Forest Plot. Collapse / Syncope as Presenting Features.

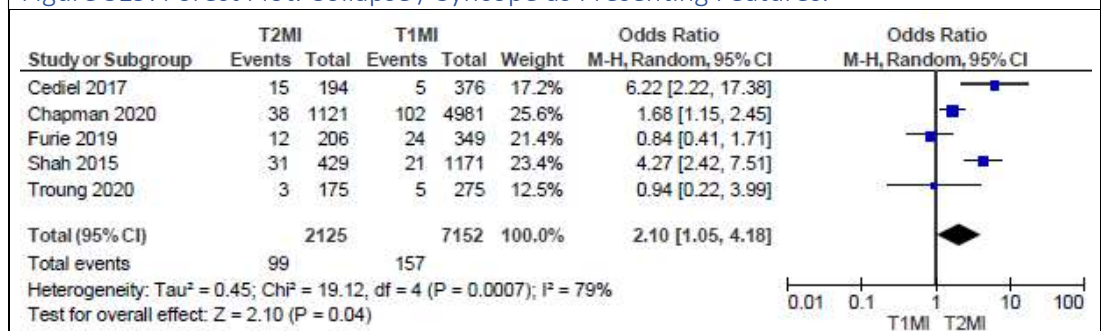


Figure S20. Forest Plot. ST Elevation on ECG.

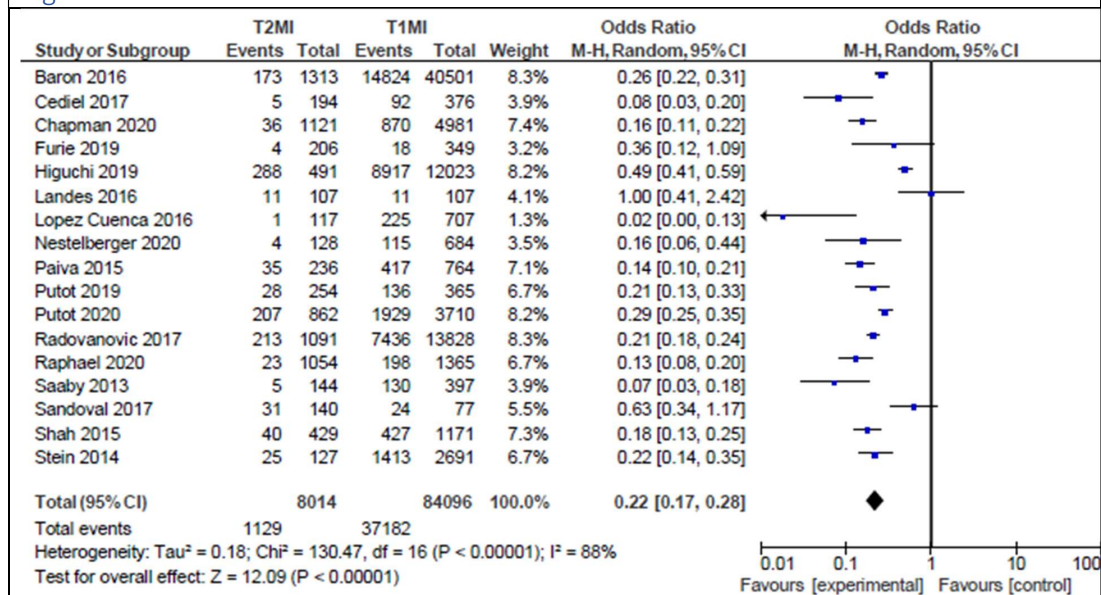


Figure S21. Forest Plot. ST Depression or T Wave Inversion on ECG.

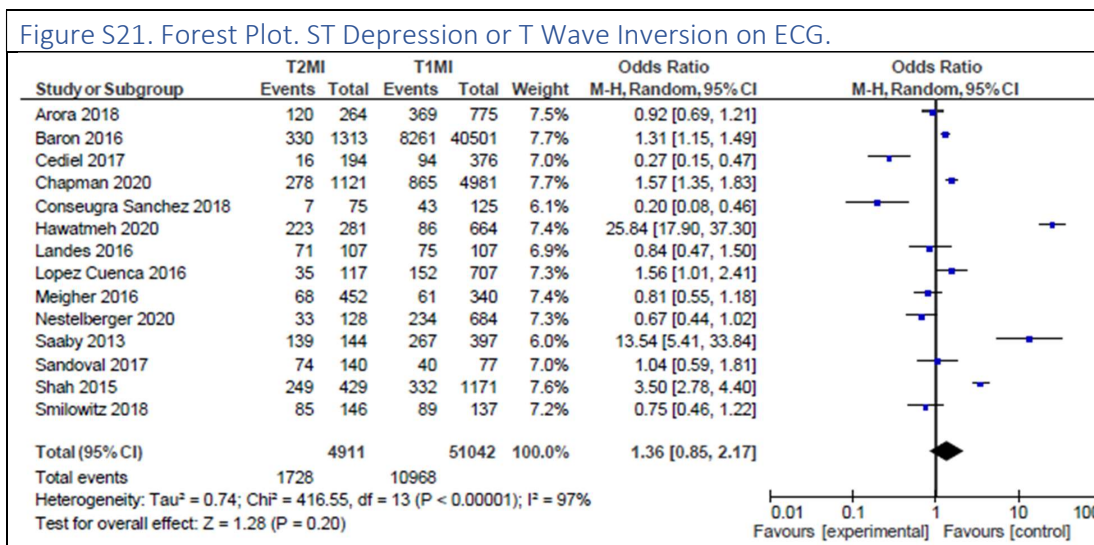


Figure S22. Forest Plot. Q Waves on ECG.

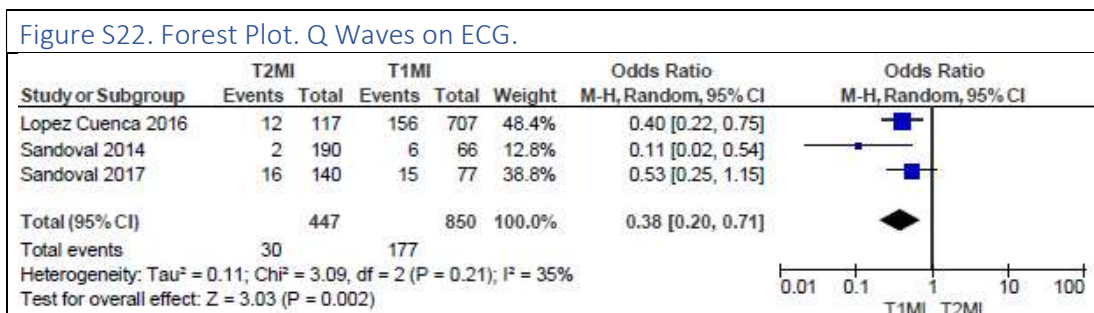


Figure S23. Forest Plot. Non-specific ST Changes on ECG.

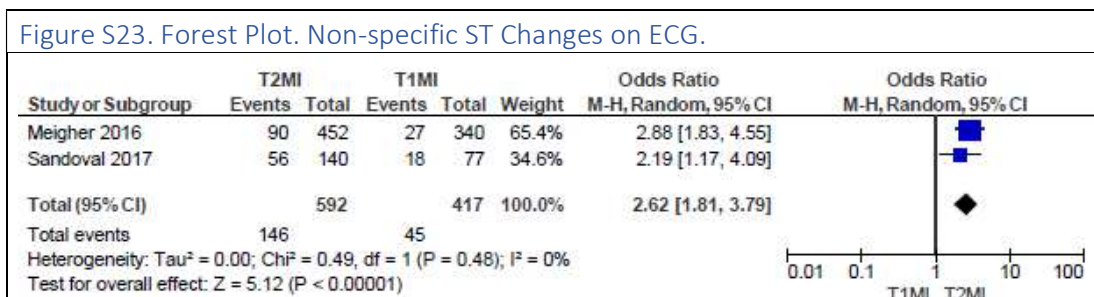




Figure S24. Forest Plot. Left Bundle Branch Block on ECG.

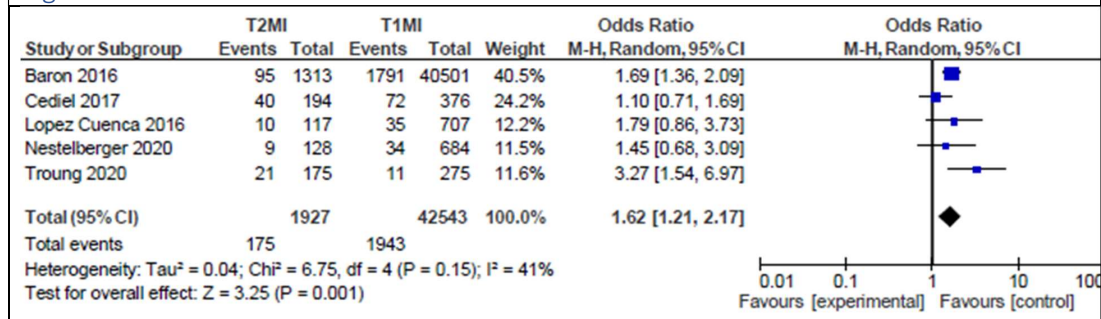


Figure S25. Forest Plot. Atrial Fibrillation on ECG.

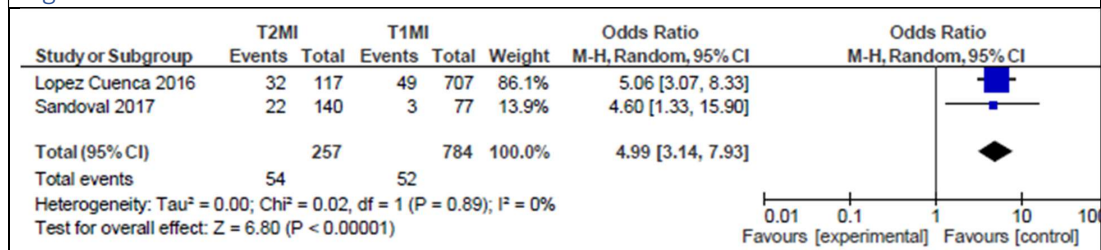


Figure S26. Forest Plot. Coronary Angiogram Performed.

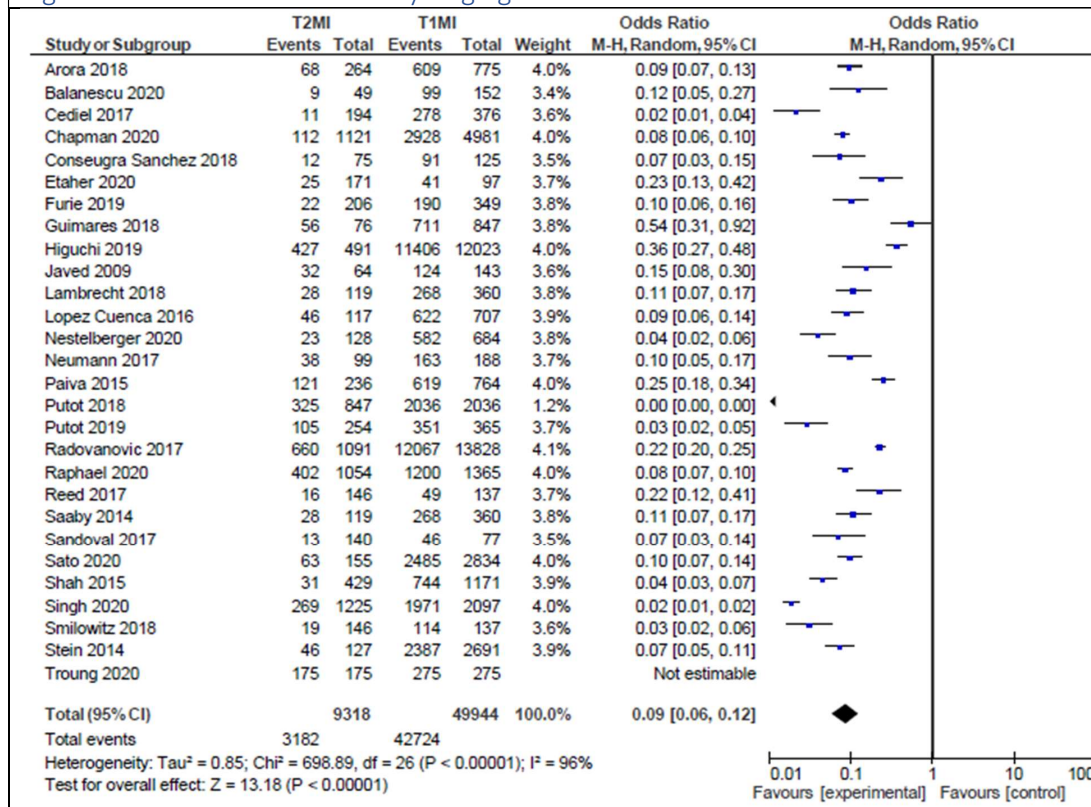


Figure S27. Forest Plot. Obstructive Coronary Artery Disease on Coronary Angiogram.

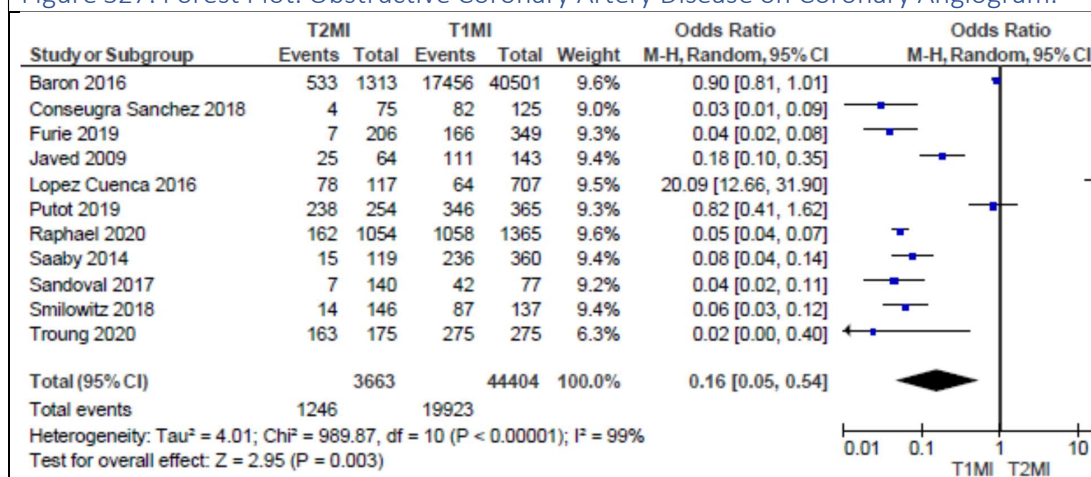


Figure S28. Forest Plot. Multivessel Disease on Coronary Angiogram.

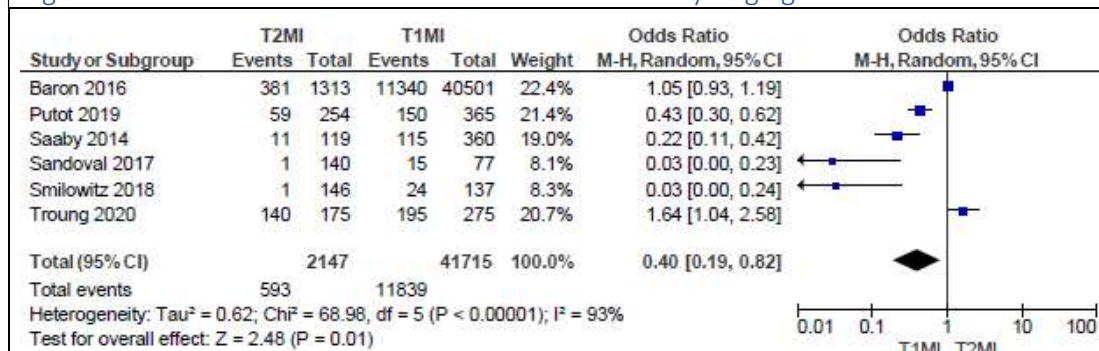


Figure S29. Forest Plot. Echocardiogram Performed.

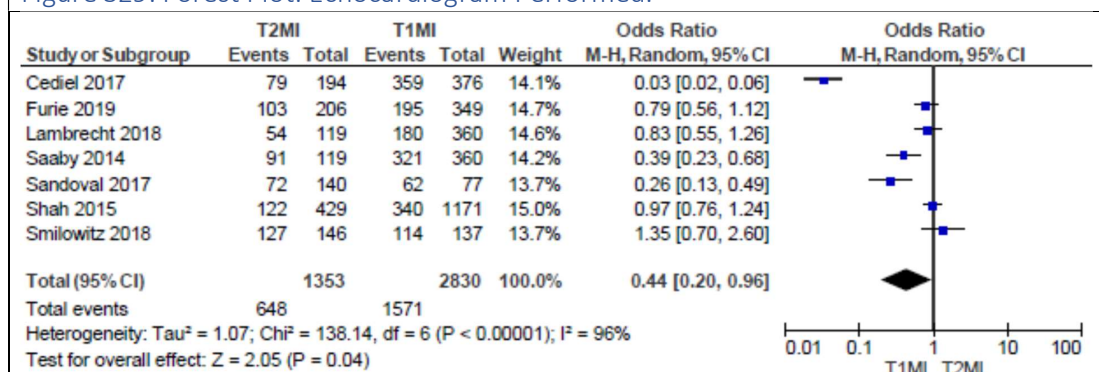


Figure S30. Forest Plot. Regional Wall Motion Abnormalities on Echocardiogram.

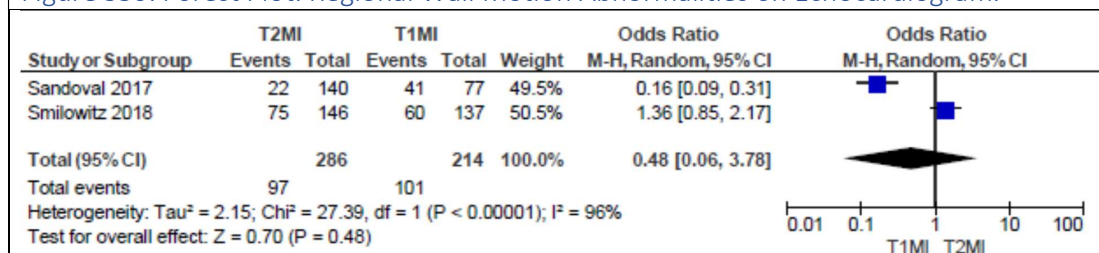


Figure S31. Forest Plot. Beta-Blockers Prescribed.

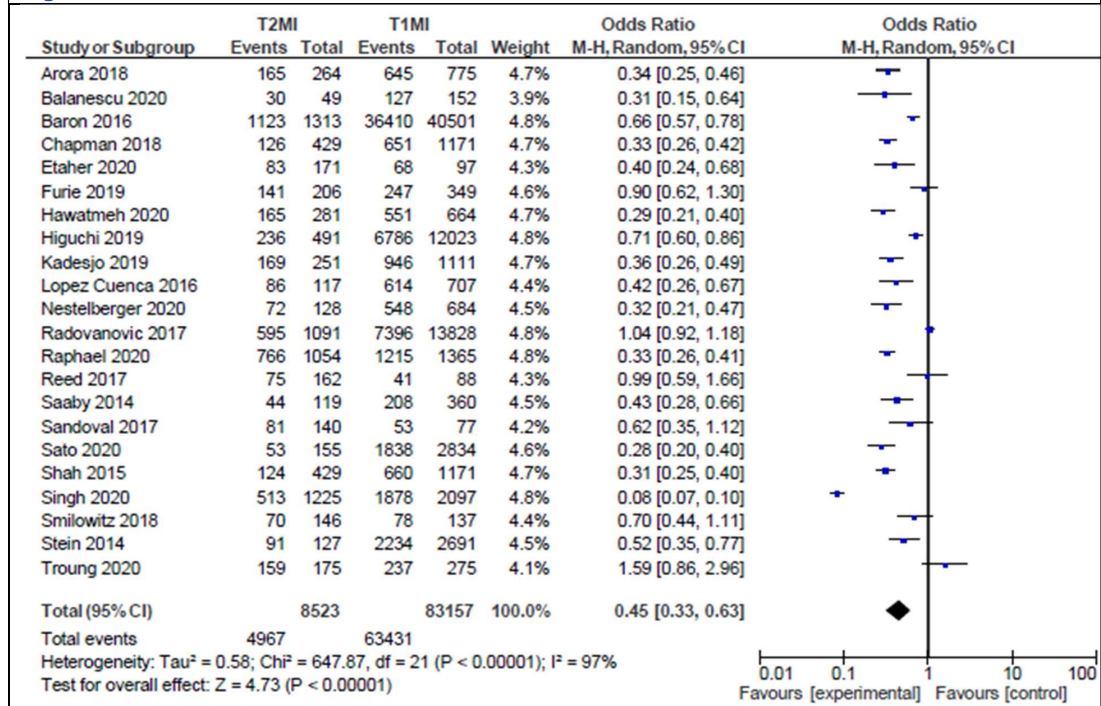


Figure S32. Forest Plot. ACEi/ARB Prescribed.

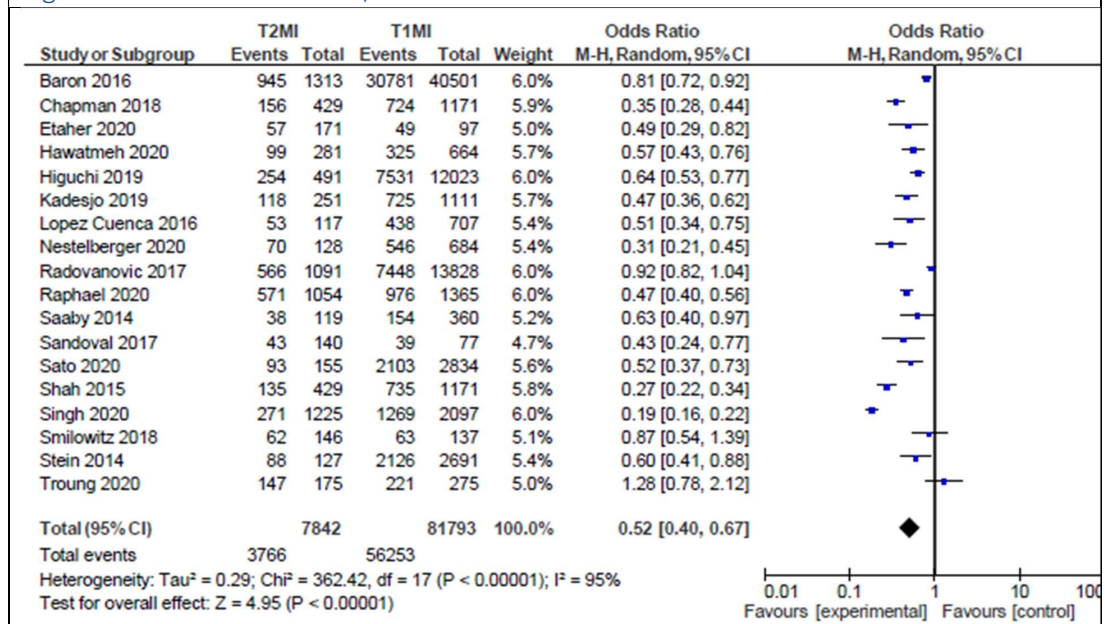


Figure S33. Forest Plot. Antiplatelets Prescribed.

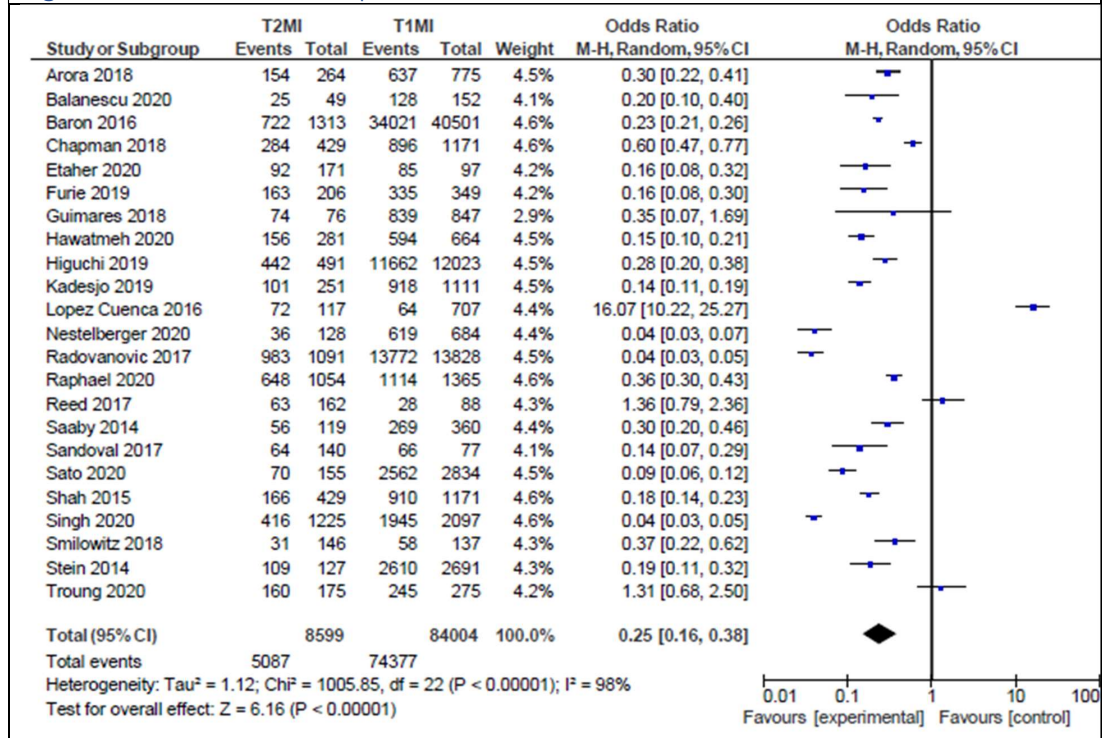


Figure S34. Forest Plot. Anticoagulants Prescribed.

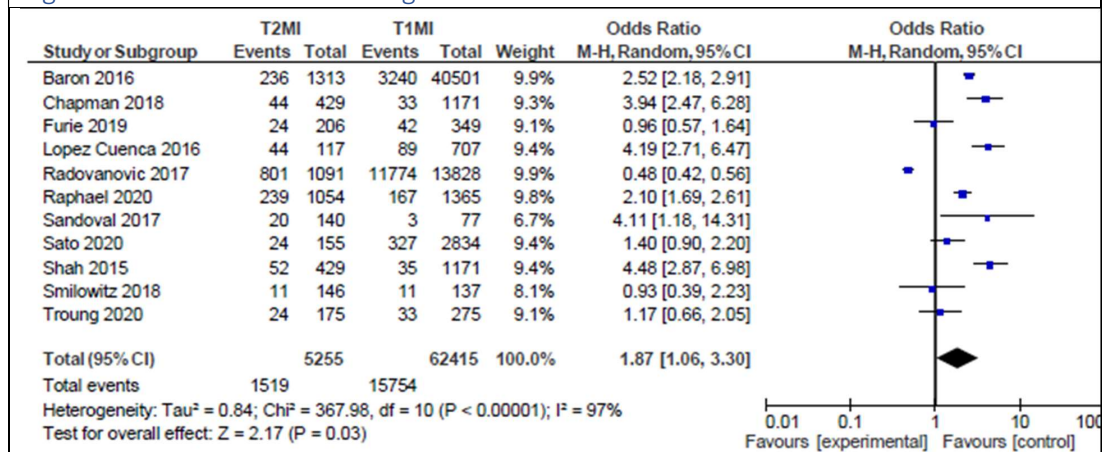


Figure S35. Forest Plot. Antianginal Drugs Prescribed.

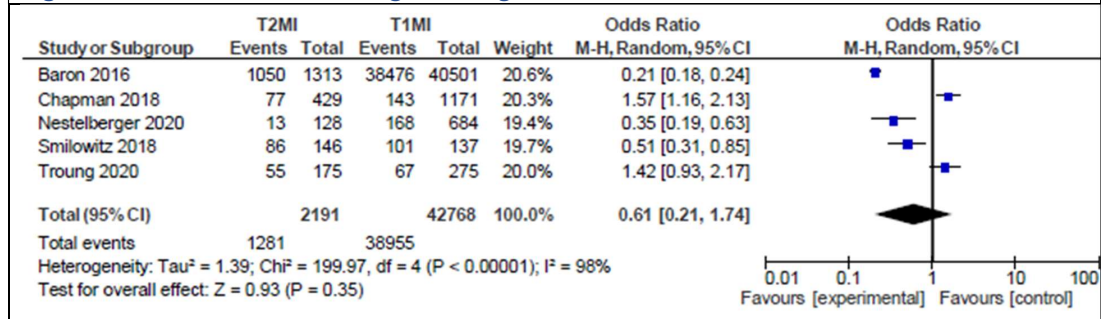


Figure S36. Forest Plot. Diuretics Prescribed.

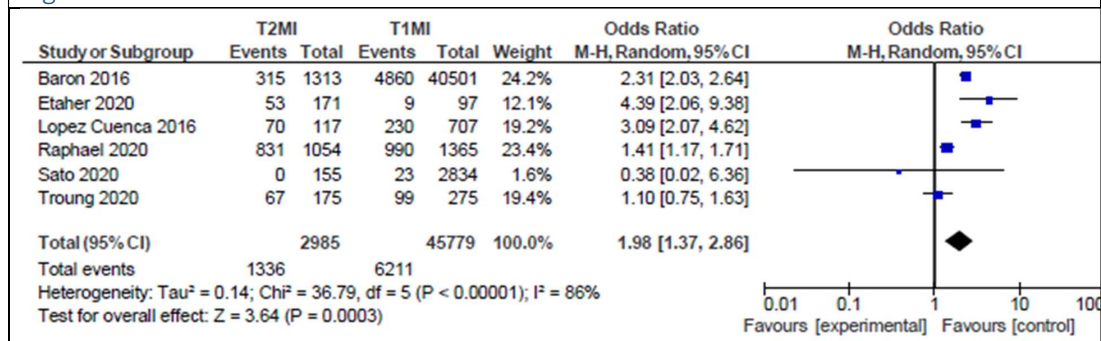


Figure S37. Forest Plot. Statins Prescribed.

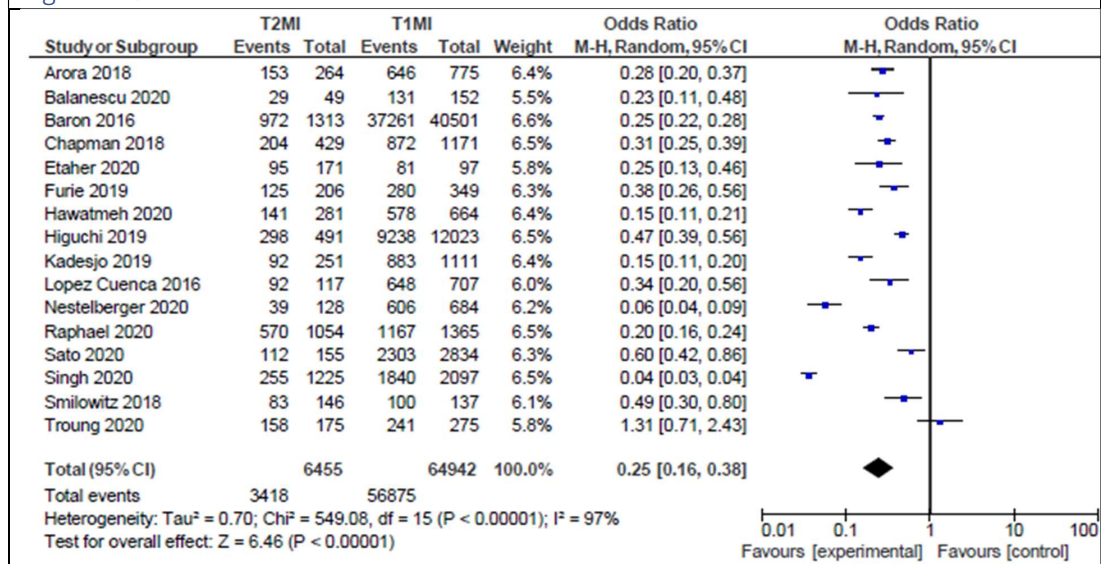


Figure S38. Forest Plot. Percutaneous Coronary Intervention Performed.

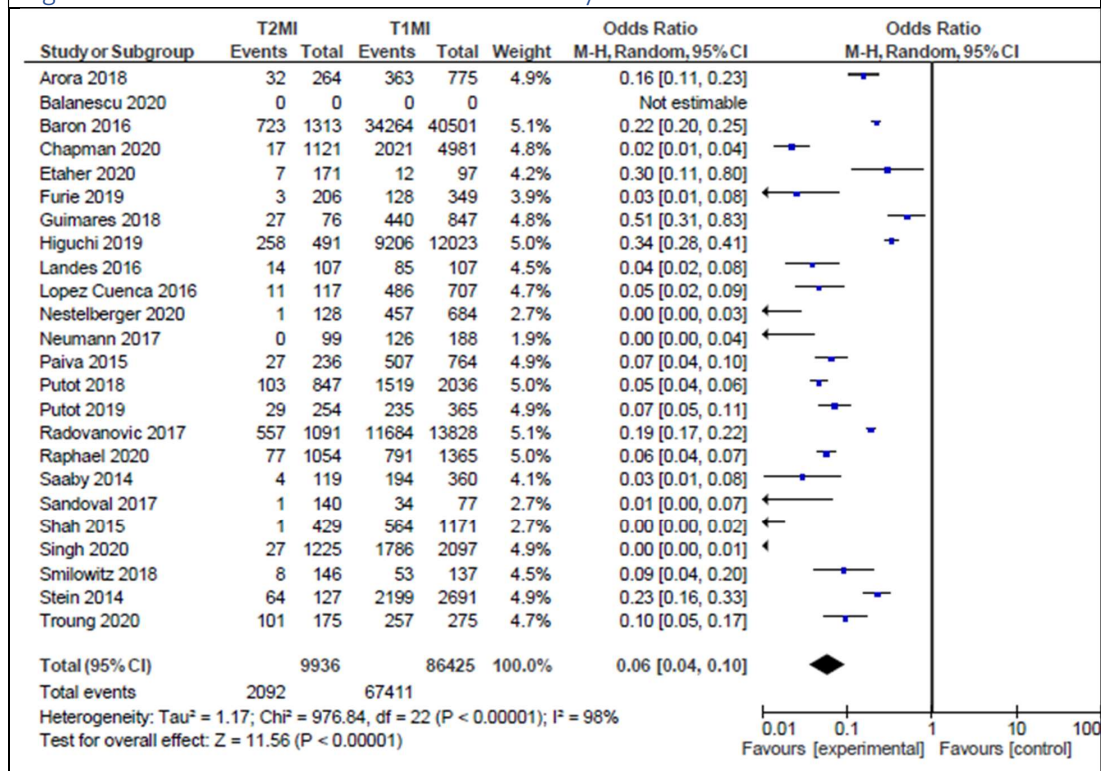


Figure S39. Forest Plot. Coronary Artery Bypass Graft Performed.

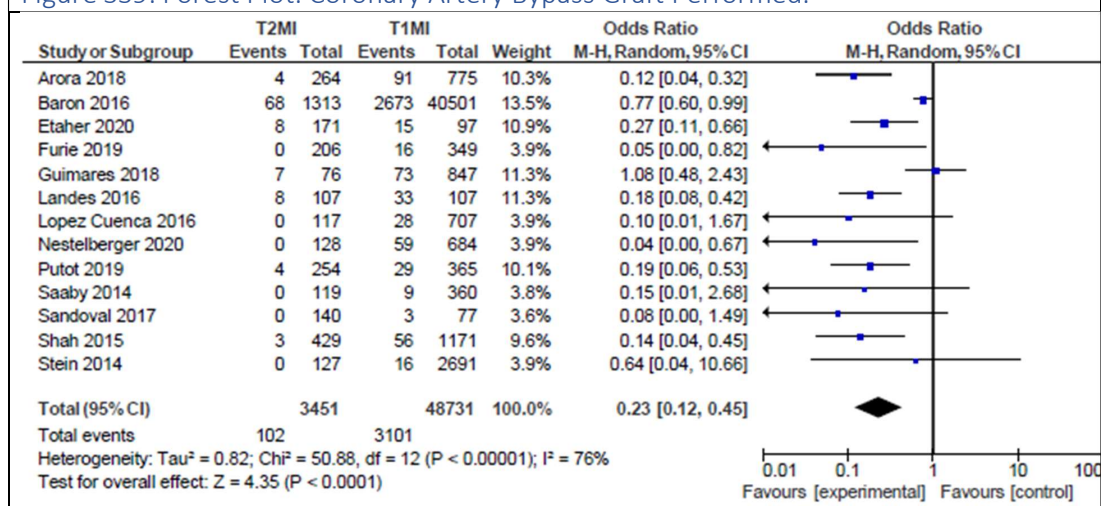


Figure S40. All cause In-hospital mortality. T2MI compared to T1MI.

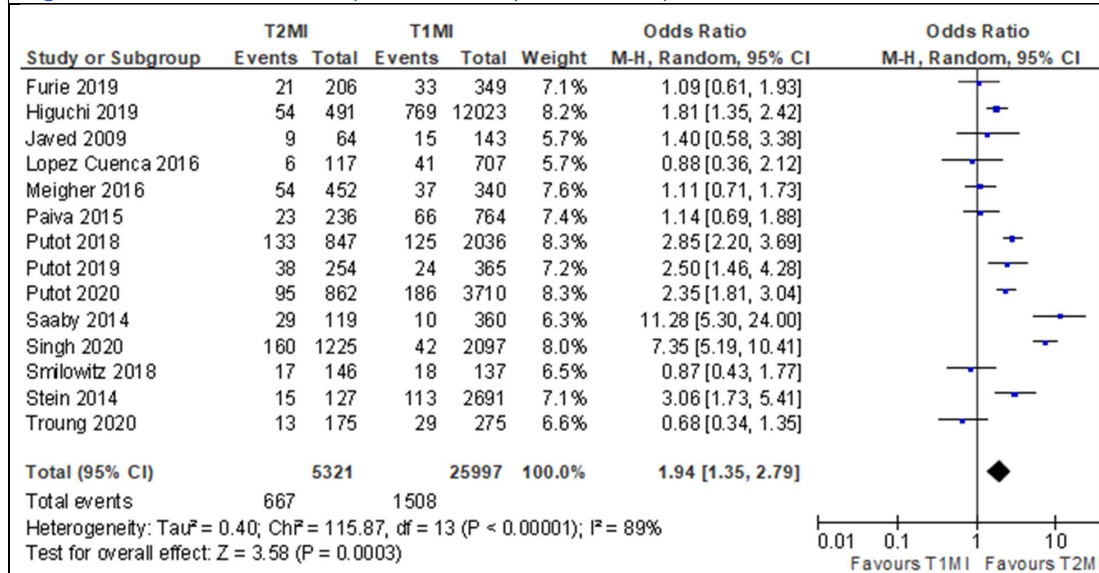


Figure S41. Short-term all-cause mortality. T2MI compared to T1MI.

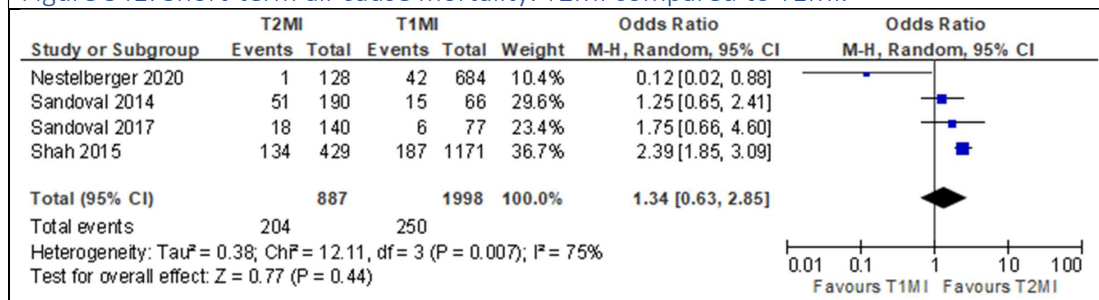


Figure S42. Two-year all-cause mortality. T2MI compared to T1MI.

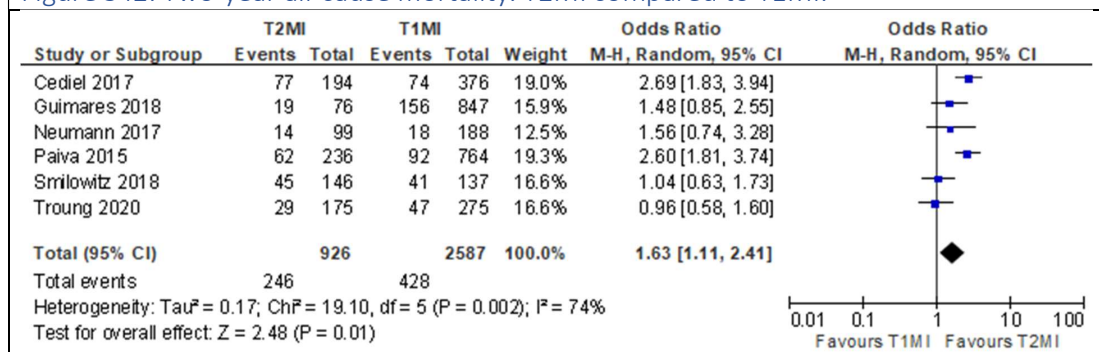




Figure S43. Three-year all-cause mortality. T2MI compared to T1MI.

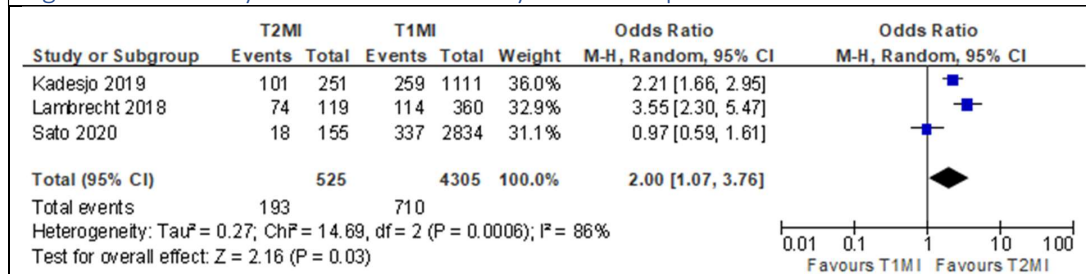


Figure S44. CVS In-hospital mortality. T2MI compared to T1MI.

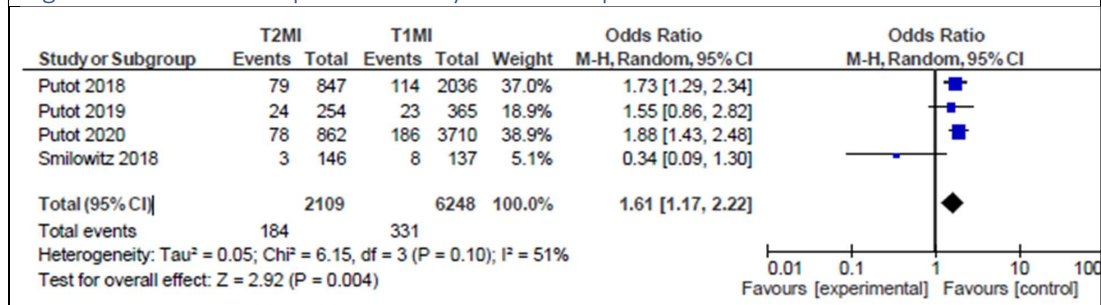
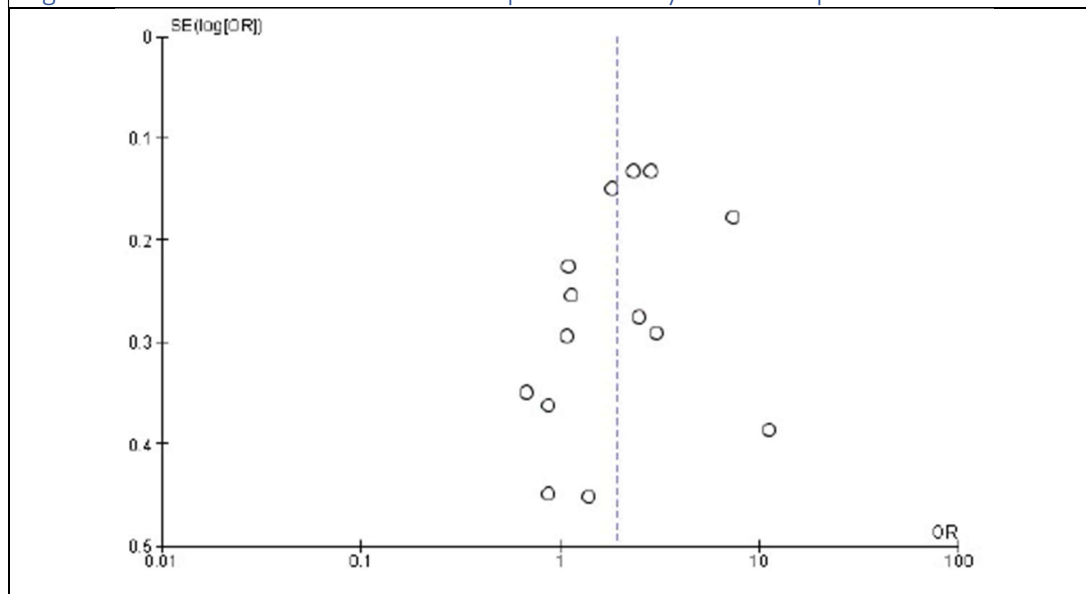
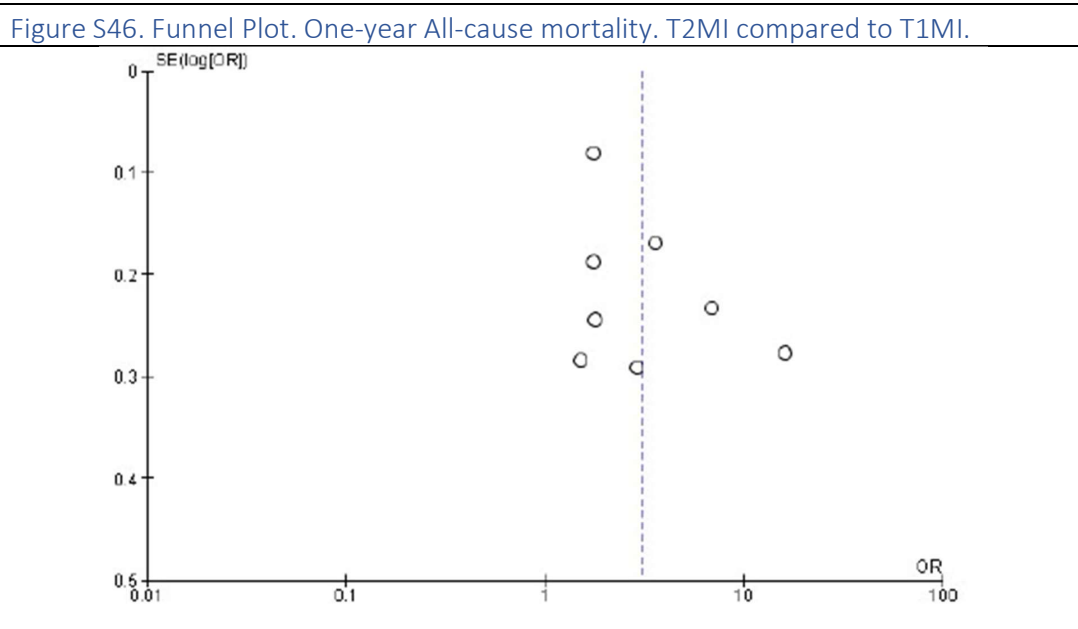


Figure S45. Funnel Plot. All-cause In-hospital mortality. T2MI compared to T1MI.





### References

1. Arora S, Strassle PD, Qamar A, Wheeler EN, Levine AL, Misenheimer JA, et al. Impact of Type 2 Myocardial Infarction (MI) on Hospital-Level MI Outcomes: Implications for Quality and Public Reporting. *Journal of the American Heart Association*. 2018;7(7).
2. Balanescu DV, Donisan T, Deswal A, Palaskas N, Song J, Lopez-Mattei J, et al. Acute myocardial infarction in a high-risk cancer population: Outcomes following conservative versus invasive management. *International journal of cardiology*. 2020;313:1-8.
3. Baron T, Hambraeus K, Sundström J, Erlinge D, Jernberg T, Lindahl B. Impact on Long-Term Mortality of Presence of Obstructive Coronary Artery Disease and Classification of Myocardial Infarction. *Am J Med*. 2016;129(4):398-406.
4. Bonaca MP, Wiviott SD, Braunwald E, Murphy SA, Ruff CT, Antman EM, et al. American College of Cardiology/American Heart Association/European Society of Cardiology/World Heart Federation universal definition of myocardial infarction classification system and the risk of cardiovascular death: observations from the TRITON-TIMI 38 trial (Trial to Assess Improvement in Therapeutic Outcomes by Optimizing Platelet Inhibition With Prasugrel-Thrombolysis in Myocardial Infarction 38). *Circulation*. 2012;125(4):577-83.
5. Cediël G, Gonzalez-Del-Hoyo M, Carrasquer A, Sanchez R, Boqué C, Bardají A. Outcomes with type 2 myocardial infarction compared with non-ischaemic myocardial injury. *Heart (British Cardiac Society)*. 2017;103(8):616-22.
6. Chapman AR, Shah ASV, Lee KK, Anand A, Francis O, Adamson P, et al. Long-Term Outcomes in Patients With Type 2 Myocardial Infarction and Myocardial Injury. *Circulation*. 2018;137(12):1236-45.
7. Chapman AR, Adamson PD, Shah ASV, Anand A, Strachan FE, Ferry AV, et al. High-Sensitivity Cardiac Troponin and the Universal Definition of Myocardial Infarction. *Circulation*. 2020;141(3):161-71.
8. Consuegra-Sánchez L, Martínez-Díaz JJ, de Guadiana-Romualdo LG, Wasniewski S, Esteban-Torrella P, Clavel-Ruipérez FG, et al. No additional value of conventional and high-sensitivity cardiac

- troponin over clinical scoring systems in the differential diagnosis of type 1 vs. type 2 myocardial infarction. *Clinical chemistry and laboratory medicine*. 2018;56(5):857-64.
9. El-Haddad H, Robinson E, Swett K, Wells GL. Prognostic implications of type 2 myocardial infarctions. 2012.
  10. Etaher A, Gibbs OJ, Saad YM, Frost S, Nguyen TL, Ferguson I, et al. Type-II myocardial infarction and chronic myocardial injury rates, invasive management, and 4-year mortality among consecutive patients undergoing high-sensitivity troponin T testing in the emergency department. *European heart journal Quality of care & clinical outcomes*. 2020;6(1):41-8.
  11. Furie N, Israel A, Gilad L, Neuman G, Assad F, Ben-Zvi I, et al. Type 2 myocardial infarction in general medical wards: Clinical features, treatment, and prognosis in comparison with type 1 myocardial infarction. *Medicine*. 2019;98(41):e17404.
  12. Guimarães PO, Leonardi S, Huang Z, Wallentin L, de Werf FV, Aylward PE, et al. Clinical features and outcomes of patients with type 2 myocardial infarction: Insights from the Thrombin Receptor Antagonist for Clinical Event Reduction in Acute Coronary Syndrome (TRACER) trial. *Am Heart J*. 2018;196:28-35.
  13. Hawatmeh A, Thawabi M, Aggarwal R, Abirami C, Vavilin I, Wasty N, et al. Implications of Misclassification of Type 2 Myocardial Infarction on Clinical Outcomes. *Cardiovascular revascularization medicine : including molecular interventions*. 2020;21(2):176-9.
  14. Higuchi S, Suzuki M, Horiuchi Y, Tanaka H, Saji M, Yoshino H, et al. Higher non-cardiac mortality and lesser impact of early revascularization in patients with type 2 compared to type 1 acute myocardial infarction: results from the Tokyo CCU Network registry. *Heart Vessels*. 2019;34(7):1140-7.
  15. Javed U, Aftab W, Ambrose JA, Wessel RJ, Mouanoutoua M, Huang G, et al. Frequency of elevated troponin I and diagnosis of acute myocardial infarction. *The American journal of cardiology*. 2009;104(1):9-13.
  16. Kadesjö E, Roos A, Siddiqui A, Desta L, Lundbäck M, Holzmann MJ. Acute versus chronic myocardial injury and long-term outcomes. *Heart (British Cardiac Society)*. 2019;105(24):1905-12.
  17. Lambrecht S, Sarkisian L, Saaby L, Poulsen TS, Gerke O, Hosbond S, et al. Different Causes of Death in Patients with Myocardial Infarction Type 1, Type 2, and Myocardial Injury. *Am J Med*. 2018;131(5):548-54.
  18. Landes U, Bental T, Orvin K, Vaknin-Assa H, Rechavia E, Iakobishvili Z, et al. Type 2 myocardial infarction: A descriptive analysis and comparison with type 1 myocardial infarction. *Journal of cardiology*. 2016;67(1):51-6.
  19. López-Cuenca A, Gómez-Molina M, Flores-Blanco PJ, Sánchez-Martínez M, García-Narbon A, De Las Heras-Gómez I, et al. Comparison between type-2 and type-1 myocardial infarction: clinical features, treatment strategies and outcomes. *J Geriatr Cardiol*. 2016;13(1):15-22.
  20. Meigher S, Thode HC, Peacock WF, Bock JL, Gruberg L, Singer AJ. Causes of Elevated Cardiac Troponins in the Emergency Department and Their Associated Mortality. *Academic emergency medicine : official journal of the Society for Academic Emergency Medicine*. 2016;23(11):1267-73.
  21. Nestelberger T, Boeddinghaus J, Badertscher P, Twerenbold R, Wildi K, Breitenbücher D, et al. Effect of Definition on Incidence and Prognosis of Type 2 Myocardial Infarction. *J Am Coll Cardiol*. 2017;70(13):1558-68.
  22. Neumann JT, Sörensen NA, Rübsamen N, Ojeda F, Renné T, Qaderi V, et al. Discrimination of patients with type 2 myocardial infarction. *Eur Heart J*. 2017;38(47):3514-20.
  23. Paiva L, Providência R, Barra S, Dinis P, Faustino AC, Gonçalves L. Universal definition of myocardial infarction: clinical insights. *Cardiology*. 2015;131(1):13-21.
  24. Pandey AK, Duong T, Swiatkiewicz I, Daniels LB. A Comparison of Biomarker Rise in Type 1 and Type 2 Myocardial Infarction. *The American journal of medicine*. 2020;133(10):1203-8.

25. Putot A, Derrida SB, Zeller M, Avondo A, Ray P, Manckoundia P, et al. Short-Term Prognosis of Myocardial Injury, Type 1, and Type 2 Myocardial Infarction in the Emergency Unit. *Am J Med.* 2018;131(10):1209-19.
26. Putot A, Jeanmichel M, Chagué F, Avondo A, Ray P, Manckoundia P, et al. Type 1 or type 2 myocardial infarction in patients with a history of coronary artery disease: Data from the emergency department. *Journal of Clinical Medicine.* 2019;8(12).
27. Putot A, Jeanmichel M, Chague F, Manckoundia P, Cottin Y, Zeller M. Type 2 Myocardial Infarction: A Geriatric Population-based Model of Pathogenesis. *Aging and disease.* 2020;11(1):108-17.
28. Radovanovic D, Pilgrim T, Seifert B, Urban P, Pedrazzini G, Erne P. Type 2 myocardial infarction: incidence, presentation, treatment and outcome in routine clinical practice. *Journal of cardiovascular medicine (Hagerstown, Md).* 2017;18(5):341-7.
29. Raphael CE, Roger VL, Sandoval Y, Singh M, Bell M, Lerman A, et al. Incidence, Trends, and Outcomes of Type 2 Myocardial Infarction in a Community Cohort. *Circulation.* 2020;141(6):454-63.
30. Reed GW, Horr S, Young L, Clevenger J, Malik U, Ellis SG, et al. Associations Between Cardiac Troponin, Mechanism of Myocardial Injury, and Long-Term Mortality After Noncardiac Vascular Surgery. *Journal of the American Heart Association.* 2017;6(6).
31. Saaby L, Poulsen TS, Hosbond S, Larsen TB, Pyndt Diederichsen AC, Hallas J, et al. Classification of myocardial infarction: frequency and features of type 2 myocardial infarction. *Am J Med.* 2013;126(9):789-97.
32. Saaby L, Poulsen TS, Diederichsen AC, Hosbond S, Larsen TB, Schmidt H, et al. Mortality rate in type 2 myocardial infarction: observations from an unselected hospital cohort. *Am J Med.* 2014;127(4):295-302.
33. Sandoval Y, Thorsden SE, Smith SW, Schulz KM, Murakami MM, Pearce LA, et al. Cardiac troponin changes to distinguish type 1 and type 2 myocardial infarction and 180-day mortality risk. *European heart journal Acute cardiovascular care.* 2014;3(4):317-25.
34. Sandoval Y, Smith SW, Sexter A, Thorsden SE, Bruen CA, Carlson MD, et al. Type 1 and 2 Myocardial Infarction and Myocardial Injury: Clinical Transition to High-Sensitivity Cardiac Troponin I. *Am J Med.* 2017;130(12):1431-9.e4.
35. Sato R, Sakamoto K, Kaikita K, Tsujita K, Nakao K, Ozaki Y, et al. Long-Term Prognosis of Patients with Myocardial Infarction Type 1 and Type 2 with and without Involvement of Coronary Vasospasm. *Journal of clinical medicine.* 2020;9(6).
36. Shah AS, McAllister DA, Mills R, Lee KK, Churchhouse AM, Fleming KM, et al. Sensitive troponin assay and the classification of myocardial infarction. *Am J Med.* 2015;128(5):493-501.e3.
37. Singh A, Gupta A, DeFilippis EM, Qamar A, Biery DW, Almarzooq Z, et al. Cardiovascular Mortality After Type 1 and Type 2 Myocardial Infarction in Young Adults. *Journal of the American College of Cardiology.* 2020;75(9):1003-13.
38. Smilowitz NR, Subramanyam P, Gianos E, Reynolds HR, Shah B, Sedlis SP. Treatment and outcomes of type 2 myocardial infarction and myocardial injury compared with type 1 myocardial infarction. *Coronary artery disease.* 2018;29(1):46-52.
39. Stein GY, Herscovici G, Korenfeld R, Matetzky S, Gottlieb S, Alon D, et al. Type-II myocardial infarction--patient characteristics, management and outcomes. *PLoS One.* 2014;9(1):e84285.
40. Truong HH, Victor MV, Imad MA, Kobalava ZD, Parvathy UT, Al-Zakwani I. Mortality and morbidity associated with type 2 myocardial infarction: A single-center study. *Annals of Clinical Cardiology.* 2020;2(2):70-9.