Aspirin as main therapy for CV disease? Absolutely YES!!!





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ANTITHROMBOTIC DRUGS USED IN ACS/PCI

What's Your Cocktail?



NSTEMI: The Role of GP IIb/IIIa inhibitors in the era of clopidogrel and direct thrombin inhibitors Shifting the paradigm !!

"Ilb or not Ilb?"

Major Considerations:

- 1) Trials performed in the "good <u>old</u> days"
 - Less experience; not all with stents; devices
- 2) Antiplatelet therapy
 - 1st generation thienopyridine (ticlopidine)
- 3) Anticoagulant therapy
 - indirect thrombin inhibitors

William Shakespeare (1564- 1616)

WHY WE ARE DEBATING???

Lack of synergy data for antithrombotics;

Growing number of patients with both CAD and atrial fibrillation;

Benefit of antiplatelets for CAD, but NOAC's for stroke prevention;

Both drug classes are heavily driven by industry; and triple therapy is too much;

Aspirin is a "weak" spot

Underlying vascular events and outcomes in aspirin trials

| | | No (%) of va | scular events | | | Odds ratio (CI) | % Odds |
|---|------------------------|---------------------------|-----------------------|-----------------------|----------|--|-------------------|
| Category of trial | No of trials with data | Allocated antiplatelet | Adjusted control | Observed- expected | Variance | Antiplatelet:control | reduction (SE) |
| Previous myocardial infarction | 12 | 1345/9984 (13.5) | 1708/10 022 (17.0) | -159.8 | 567.6 | | 25 (4) |
| Acute myocardial infarction | 15 | 1007/9658 (10.4) | 1370/9644 (14.2) | -181.5 | 519.2 | | 30 (4) |
| Previous stroke/transien ischaemic attack | nt 21 | 2045/11 493 (17.8) | 2464/11 527 (21.4) | -152.1 | 625.8 | # | 22 (4) |
| Acute stroke | 7 | 1670/20 418 (8.2) | 1858/20 403 (9.1) | -94.6 | 795.3 | | 11 (3) |
| Other high risk | 140 | 1638/20 359 (8.0) | 2102/20 543 (10.2) | -222.3 | 737.0 | | 26 (3) |
| Subtotal: all except acute stroke | 188 | 6035/51 494 (11.7) | 7644/51 736 (14.8) | -715.7 | 2449.6 | Φ | 25 (2) |
| All trials | 195 | 7705/71 912 (10.7) | 9502/72 139 (13.2) | -810.3 | 3244.9 | • | 22 (2) |
| Heterogeneity of odds reductions between: | | | | | (| 0 0.5 1.0 1.5 2. | 0 |
| categories of trial: χ^2 =21.4, df=4; P=0.0003 | | | | | | Antiplatelet better Antiplatelet worse | |
| Acute stroke v other: χ^2 =18.0, df=1; P=0.00002 Treatment effect P<0.0001 | | | | | | | |

Antithrombotic Trialists Collaboration; Brit Med J; 2002

Meta-analyses of aspirin doses and vascular outcomes

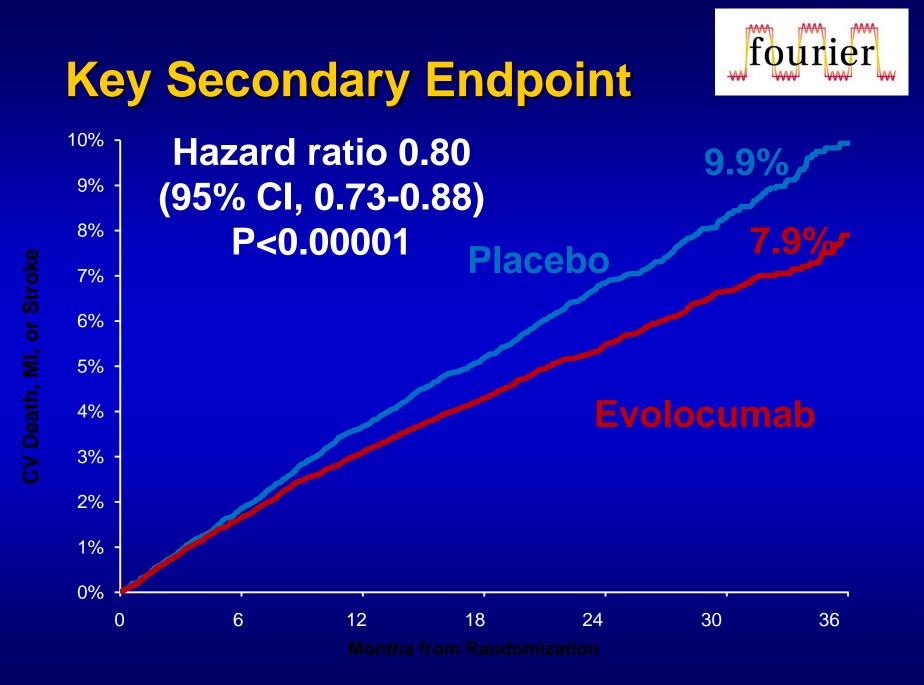
| | | No (%) of vas | cular events | | | Odds ratio (CI) | % Odds |
|-------------------------|------------------------|---------------------------|-----------------------|-----------------------|----------|------------------------|-------------------|
| Category of trial | No of trials with data | Allocated antiplatelet | Adjusted control | Observed- expected | Variance | Antiplatelet : control | reduction (SE) |
| Aspirin alone (mg daily | <i>v</i>): | | | | | | |
| 500-1500 | 34 | 1621/11 215 (14.5) | 1930/11 236 (17.2) | -147.1 | 707.8 | | 19 (3) |
| 160-325 | 19 | 1526/13 240 (11.5) | 1963/13 273 (14.8) | -219.9 | 742.6 | | 26 (3) |
| 75-150 | 12 | 366/3370 (10.9) | 517/3406 (15.2) | -72.0 | 183.8 | | 32 (6) |
| <75 | 3 | 316/1827 (17.3) | 354/1828 (19.4) | -18.9 | 136.5 | | 13 (8) |
| Any aspirin* | 65 | 3829/29 652 (12.9) | 4764/29 743 (16.0) | -452.3 | 1717.0 | \$ | 23 (2) |

Antithrombotic Trialists Collaboration; Brit Med J; 2002

Aspirin in primary preventiondefinite benefit for non-fatal MI

| | | Aspirin | | Control | | | |
|------------|-----------------|---------------------------------|--------------------|-----------------|---------------------------------|--------------------|--|
| Trial Name | Non-Fatal MI | Important Vascular Events | No. of Subjects | Non-Fatal MI | Important Vascular Events | No. of Subjects | |
| PHS | 129 | 307 | 11,037 | 213 | 370 | 11,034 | |
| BDT | 80 | 289 | 3429* | 41 | 147 | 1710* | |
| TPT | 94 | 228 | 2545 | 137 | 260 | 2540 | |
| НОТ | - | 315 | - | - | 368 | - | |
| PPP | 15 | 47 | 2226 | 22 | 71 | 2269 | |
| Total | 318 | 1186 | 19,237 | 413 | 1216 | 17,553 | |

Antithrombotic Trialists Collaboration; Brit Med J; 2002



WHAT IF WE REMOVE ASPIRIN ???

Impossible to justify such change;

Ignore over 100!!! trials, based on what?;

Aspirin trials are less biased than new ones;

Price burden;

What to do with colon cancer reduction?

Aspirin will stay !