AHA Scientific Sessions 2015
Late Breaking Clinical Trials

**SPRINT**

Discussant:

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November 9th, 2015
**ACCORD - Primary Outcome**
Nonfatal MI, Nonfatal Stroke or CVD Death

![Graph showing patients with events over years post-randomization](graph1.jpg)

- Patients with Events (%)
  - Intensive
  - Standard

- Years Post-Randomization

- **HR = 0.88**
- **95% CI (0.73-1.06)**
- **P=0.20**

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**SPRINT – Primary Outcome**
MI, non-MI ACS, Stroke, HF, CV death

![Graph showing cumulative hazard over years post-randomization](graph2.jpg)

- Standard
- Intensive

- Years Post-Randomization

- **HR = 0.75**
- **95% CI (0.64-0.89)**
- **P=<0.001**

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Whelton PK. AHA, Nov. 2-15
ACCORD - Primary Outcome
MI, Stroke or CVD Death

N=4377
CVD event rate ½ of predicted in Standard Group – Underpowered

HR = 0.88
95% CI (0.73-1.06)
P=0.20

SPRINT – Primary Outcome
MI, non-MI ACS, Stroke, HF, CV death

N=9361

HR = 0.75
95% CI (0.64-0.89)
P=<0.001

Whelton PK. AHA, Nov. 2-15
# SPRINT – Some Observations

<table>
<thead>
<tr>
<th>Age Condition</th>
<th># of Trials</th>
<th>Success Rate (95% CI)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age &lt; 75</td>
<td></td>
<td>0.80 (0.64, 1.00)</td>
<td>0.32</td>
</tr>
<tr>
<td>Age ≥ 75</td>
<td></td>
<td>0.67 (0.51, 0.86)</td>
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</tr>
<tr>
<td>Category</td>
<td>Percentage</td>
<td>95% CI</td>
<td>Hazard Ratio</td>
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<tr>
<td>Age ≥ 75</td>
<td>0.67</td>
<td>(0.51,0.86)</td>
<td></td>
</tr>
<tr>
<td>SBP ≤ 132</td>
<td>0.70</td>
<td>(0.51,0.95)</td>
<td>0.77</td>
</tr>
<tr>
<td>132 &lt; SBP &lt; 145</td>
<td>0.77</td>
<td>(0.57,1.03)</td>
<td></td>
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<tr>
<td>SBP ≥ 145</td>
<td>0.83</td>
<td>(0.63,1.09)</td>
<td></td>
</tr>
</tbody>
</table>
SPRINT – Some Observations.

The Price we Pay?

1. Patients without CKD at Baseline: \( \geq 30\% \) reduction in eGFR:
   - Intensive: 1.21\%/y
   - Standard: 0.35\%/y  \( P<0.0001 \)  (?RAS blockers)

2. Acute kidney injury: 4.1\% vs. 2.5\%

3. Hypotension, syncope (but no increase in falls), hyponatremia, hypokalemia  (?diuretics)