SPRINT

What Remains Unanswered?

Where Do We Go From Here?
How generalizable are the results?
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How is the J Curve relationship impacted by:

- Elevated Blood Pressure?
- Age?
- Cardiovascular and Cerebrovascular Disease?
- Chronic Kidney Disease?
- Diabetes Mellitus?
Unanswered questions in need of further studies:

• What is the optimal SBP goal for patients with DM?
  • Did ACCORD answer this?
If the ACCORD results and interpretation are correct...

- Is the difference in SPRINT and ACCORD results due to the impact of DM on vasculature?
Diabetes impact on vasculature?

- Is DM negatively impacting arteriolar autoregulation in the renal vasculature?

- Is this shifting the J curve relationship in patients with DM and HTN?
Renal Blood Flow vs. Blood Pressure
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  • Lower risk because of lipid arm
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• Trial Design Complex for ACCORD
Important related questions for diabetes mellitus:

• Should another trial in DM be done assuring adequate power?

• What SBP goal should the new ACC/AHA guidelines recommend for diabetics?
  • Should this be 140, 135, 130, or 120?
  • Recommendation will be based on expert opinion
  • Adverse events in ACCORD were few
Unanswered questions in need of further trials:

• Heart failure with low ejection fraction

• Heart failure with preserved ejection fraction

• Drug therapy for untreated SBP 120-140?
  • No benefit in previous trials in patients at this risk level?
  • Or were there power issues with these trials as well?
Unanswered questions in HTN unrelated to goal SBP:

- Will we discover meaningful ways to prevent and treat obesity?

- Will precision medicine offer opportunities to refine optimal BP management?
  - Goal SBP for individuals
  - More narrowly defined groups
Where do we go from here?

- Consider SPRINT results in new ACC/AHA Blood Pressure Management Guidelines
  - Goal SBP for various groups including DM and lower risk patients including < 50
  - Management of SBP 120-140
  - Consider Global CV Risk?
  - Classification of blood pressure?
Where do we go from here?

• Continue and increase efforts in hypertension research
  • basic science
  • translational science
  • clinical trials
  • population science
• BP measurement research
• BP components research
• Test lower goals in younger patients
Where do we go from here?

• Continue and increase efforts in related research
  • Obesity
  • Precision medicine

• Continue efforts to better implement what we know
  • lifestyle approaches
  • focus on early prevention
  • improvement of the environment
Where do we go from here?

Pause momentarily to appreciate the progress in the field of hypertension including the positive results of SPRINT
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THANK YOU