Systolic Blood Pressure Intervention Trial

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Hypothesis: A therapeutic strategy that targets a SBP of ≤ 120 mm Hg will reduce CV events compared to a strategy that targets a SBP of ≤ 140 mm Hg in people aged ≥ 55 years.

High risk groups will be targeted:
- History of CVD
- eGFR between 25 and 60
- Framingham Risk Score indicating 10-year CVD risk of ≥ 15%

The principal CV aims is composite end point:
- Cardiovascular death
- Myocardial infarction
- Stroke
- Heart failure
- Non-MI acute coronary syndrome
In **CKD sub-group** with a eGFR 25-59 mL/min/1.73 m² and < 1 g/day proteinuria, the effect of intensive BP control on

- Development of ESRD
- 50% decline in eGFR

For the **non-CKD** subgroup the effect of intensive BP control on

- Development of ESRD
- 30% decrease in eGFR to a value < 60 ml/min/1.73 m²
SPRINT- MIND hypotheses

- All-cause Dementia: Participants ≥70 years of age at study enrollment.

- Cognitive Decline: In a randomly selected subset of 2800 participants enrolled in SPRINT.

- MRI Brain Changes: Examine the small vessel ischemic disease and total brain volume. The MRI sub-study will be conducted in 640 participants.
SPRINT- Eligibility

- At least 55 years old

- Systolic blood pressure
  - 130-180 mm Hg and on 0 or 1 medication
  - 130–170 mm Hg on up to 2 medications
  - 130–160 mm Hg on up to 3 medications

- Risk (one or more of the following)
  - Presence of clinical or sub-clinical CVD other than stroke
  - CKD, defined as eGFR 25–59 mL/min/1.73m² based on the 4-variable MDRD equation
  - A Framingham Risk Score for 10-year CVD risk > 15%