



## Spotlight on Special Topics

### WHOSE DOSE IS IT ANYWAY? INDIVIDUAL PATIENT DOSE-RESPONSE CURVES FROM THE REMOTE-CARE PERSONAL-COVIDBP TRIAL

Poster Contributions

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**Background:** Hypertension remains a leading cause of disability and preventable death globally. This study tests patient use of a smartphone application (App) to record blood pressure (BP), drug (amlodipine) dose and side effects on a daily basis at home during the COVID-19 pandemic.

**Methods:** In this community-based trial with remote monitoring and remote medical management from the investigational site, participants aged 18 years and over with known hypertension and poor BP control (prior 7 day mean of 135 mmHg systolic BP or above and/or 85 mmHg diastolic BP and above) were enrolled to open label dose titration over 14 weeks, allowing personalised dosing of amlodipine (1-2mg steps from 1-10mg daily).

**Results:** 205 patients were enrolled between October 2020 and July 2021. Dose-related wanted (BP reduction) and emergence of unwanted effects are shown for selected participants (Figure). Even low doses of 1 or 2mg amlodipine reduced BP, as did small increments e.g. from 5mg to 6mg or from 6mg to 8mg. Adherence with participant completion of the daily App routines to date has been high and unrelated to age (median >90%).

**Conclusion:** Preliminary data indicate that remote clinician assessment of twice daily home BP measurements and side effects recorded in the App may inform more precise amlodipine titration and BP control. Personalised dose-response curves for both wanted and unwanted effects may allow patient and doctor to optimize long term care.

If you were Patient A or Patient B, which dose would you choose?

