

# 24h Ambulatory Blood Pressure Monitoring (ABPM) Instructions for health-care professionals

## DEVICE

- Use only validated electronic upper-arm cuff device. List of accurate devices at [www.stridebp.org](http://www.stridebp.org).
- Devices for children or pregnant women must be validated specifically in these populations.
- Annual maintenance of device is necessary.

## CUFF

- Cuff size to fit the individual's arm circumference according to device instructions.
- Smaller cuff than appropriate overestimates and larger underestimates BP.
- Each device has its own cuffs, which are not interchangeable with those of other devices.

## IMPLEMENTATION

- Perform ABPM preferably on a routine working day.
- 10-15 min are needed to initialise and fit the monitor.
- Frequency of measurement 20-30 min during daytime and night-time.
- Wrap the cuff on the non-dominant (bare) arm with lower edge 2-3 cm above the elbow crease and mid-point of bladder over the brachial artery.
- Take a test measurement.

## PATIENT'S INSTRUCTIONS

- **Explain:**
  - The device function and procedure.
  - How to refit the cuff if it becomes loose.
  - How to switch off the monitor in case of malfunction.
- **Ask to:**
  - Follow usual daily activities.
  - Remain still with arm relaxed and avoid talking during measurements.
  - Avoid driving. If necessary, then stop (if possible), or ignore measurement.
  - Avoid taking a shower or bath.
  - Place the monitor on the bed or under the pillow during sleep.
- Give patient a form to record sleeping times, drug intake, any symptom or problem during ABPM.

## INTERPRETATION

- Determine day (awake) and night (asleep) periods only according to patient's report.
- Repeat ABPM if less than 20 valid awake or less than 7 asleep BP readings.

ABPM thresholds for hypertension diagnosis			Night-time BP patterns *	
24h average:	≥130/80 mmHg	Primary criterion	Fall 10-20%:	Dipper
Daytime (awake) average:	≥135/85 mmHg	Daytime hypertension	Fall 0-10%:	Non-dipper
Night-time (asleep) average:	≥120/70 mmHg	Night-time hypertension	Fall >20%:	Extreme dipper
			Increase:	Riser

\* The diagnosis must be confirmed with repeat ABPM