

These recordings have some typical artefactual sounds. Read using the top of the meniscus. *If amplification with earphones is used, very soft continuous sounds can be heard earlier and later than using a standard speaker on some recordings, as indicated. This can be relevant during auscultation using a better stethoscope and may also depend on auditory acuity and experience in sensing soft sounds.*

No.	Answer	Comments
BP1	170/120mmHg	Phase 1 is clearly heard at 170mmHg and auscultatory sounds continue until 120mmHg (<i>although with less amplification 122 mmHg may be the last sound heard</i>). This patient is in sinus rhythm. It is important to remember that the cuff pressure should be reduced at a rate of 2-3mmHg per second or per pulse beat. This cuff has been released too quickly
BP2	194/96mmHg	The subject is in sinus rhythm. The systolic blood pressure is recorded where repetitive, clear, tapping sounds first appear for at least two consecutive beats. Therefore, occasional sounds above this level can be ignored.
BP3	132/84mmHg	The subject is in sinus rhythm. Although a few sounds are audible above 132mmHg, regular tapping sounds are not heard above this value. <i>Using amplification, soft sounds can be detected to 80 mmHg.</i>
BP4	218/116mmHg	The subject is in sinus rhythm.
BP5	178/122mmHg	The subject is in atrial fibrillation. This column demonstrates the difficulties of estimating blood pressure in arrhythmias. In atrial fibrillation, stroke volume and hence blood pressure vary depending on the preceding pulse interval. Thus blood pressure will be a rough estimate which can perhaps be improved upon only by repeated measurements. <i>A very soft sound can be detected at 120 mmHg with amplification.</i>
BP6	170/120mmHg	This falling column is a repeat of column 1. Did you record the same systolic and diastolic pressures?
BP7	178/100mmHg	This patient is in sinus rhythm. Phase 1 is heard at 178mmHg and clear sounds continue until approximately 100mmHg.
BP8	182/120mmHg	The subject is in atrial fibrillation. This demonstrates the difficulties of estimating blood pressure in atrial fibrillation, stroke volume and hence blood pressure vary depending on the preceding pulse interval. Thus blood pressure measurements need to be repeated several times.

BP10	140/88mmHg	Some irregular sounds are audible above 140mmHg. As they are neither clear nor repetitive, they can be ignored. Regular tapping sounds are heard from approximately 140mmHg and disappear at approximately 88mmHg. This patient has a sinus bradycardia (possibly caused by therapy with a beta-blocker)
BP11	104/86mmHg	The subject is in sinus rhythm
BP12	154/84mmHg	The subject is in sinus rhythm. The systolic blood pressure is recorded where repetitive, clear, tapping sounds first appear for at least two consecutive beats. <i>Without amplification, the systolic appears to be 150 mmHg.</i>
BP14	132/86mmHg	The subject is in sinus rhythm.
BP15	250/108mmHg	This blood pressure measurement has sounds which are clear and easy to hear. A few additional non-repetitive sounds are audible below 108mmHg.
BP16	154/112mmHg	The subject is in sinus rhythm. <i>Very soft continuous beats can be heard between 154 and 146 mmHg with amplification.</i>
BP17	134/86mmHg	The subject is in sinus rhythm. <i>With amplification there is a final soft sound at 84 mmHg.</i>
BP18	159/100mmHg	Although a few non-repetitive sounds are heard above 160mmHg, these are not significant. This patient is in sinus rhythm with a few ectopic beats.
BP19	111/76mmHg	The subject is in sinus rhythm
BP20	120/88mmHg	The subject is in atrial fibrillation. This column demonstrates the difficulties of estimating blood pressure in arrhythmias. In atrial fibrillation, stroke volume and hence blood pressure vary depending on the preceding pulse interval. Thus blood pressure will be a rough estimate which can perhaps be improved upon only by repeated measurements. Artefacts above 120mmHg are noted.
BP22	126/90mmHg	The subject is in atrial fibrillation. This column demonstrates the difficulties of estimating blood pressure in arrhythmias. In atrial fibrillation, stroke volume and hence blood pressure vary depending on the preceding pulse interval. An average of repeated measurements is recommended rather than a single blood pressure reading. <i>Without amplification 92 mmHg is the last easily heard sound</i>
BP23	194/106mmHg	The subject is in sinus rhythm.
BP24	198/116mmHg	The subject is in sinus rhythm.
BP25	120/80mmHg	The subject is in sinus rhythm. <i>Without amplification the pressure may be detected as 116/86mmHg</i>

BP26	182/130mmHg	The subject is in atrial fibrillation. This column demonstrates the difficulties of estimating blood pressure in arrhythmias. In atrial fibrillation, stroke volume and hence blood pressure vary depending on the preceding pulse interval. Thus blood pressure will be a rough estimate which can perhaps be improved upon only by repeated measurements. Columns 5, 8 and 26 are from the same individual, on a different occasion, illustrating the difficulty in accurately recording blood pressure in patients with arrhythmias and demonstrating why repeated measurements may be useful.
BP27	211/136mmHg	This patient has a sinus tachycardia. <i>With amplification, soft regular sounds can be heard to 130 mmHg.</i>
BP30	148/88mmHg	As the additional sounds audible before 148mmHg are irregular they can be disregarded.
BP31	211/130mmHg	This falling column is a repeat of column 27. Did you record the same systolic and diastolic pressures? Again, <i>with amplification, soft regular sounds can be heard to 130 mmHg.</i>
BP32	194/116mmHg	Sounds become muffled at approximately 146mmHg. This patient is in sinus rhythm. <i>Without amplification the systolic is easily heard at 190 mmHg.</i>
BP33	214/90mmHg	This is a good example of hypertension. <i>Without amplification the sounds disappear at 95mmHg</i>
BP34	114/71mmHg	The subject is in sinus rhythm and appears to have a relative bradycardia. <i>The sounds above 108 are indistinct but still present and regular.</i>