Corrigendum: Imaging Protocol, Feasibility, and Reproducibility of Cardiovascular Phenotyping in a Large Tri-Ethnic Population-Based Study of Older People: The Southall and Brent Revisited (SABRE) Study

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A Corrigendum on

Imaging Protocol, Feasibility, and Reproducibility of Cardiovascular Phenotyping in a Large Tri-Ethnic Population-Based Study of Older People: The Southall and Brent Revisited (SABRE) Study

by Al Saikhan, L., Alobaida, M., Bhuva, A., Chaturvedi, N., Heasman, J., Hughes, A. D., Jones, S., Eastwood, S., Manisty, C., March, K., Ghosh, A. K., Mayet, J., Oguntade, A., Tillin, T., Williams, S., Wright, A., and Park, C. (2020). Front. Cardiovasc. Med. 7:591946. doi: 10.3389/fcvm.2020.591946

In the original article, there was a numerical error in the legend for Figure 2 as published. The correct legend appears below.

3D dataset image quality score stratified by ethnicity in the overall SABRE population [N = 1,001, (A)] and among men [N = 768, (B)] and women [N = 233, (C)] participants. Numbers are percentages.

In the original article, there was a numerical error for some measures in Table 4 as published. The corrected Table 4 appears below.

In the original article, there was a numerical error in Figure 1A as published. The corrected Figure 1A appears below.
TABLE 4 | Feasibility of the cardiovascular measures in 1,438 SABRE participants.

| Measure | Feasibility |
|---------|-------------|
| **2D**  |             |
| LVIDd   | 1,354 (94%) |
| LVIDs   | 1,352 (94%) |
| IVSd    | 1,354 (94%) |
| IVSs    | 1,352 (94%) |
| PWd     | 1,354 (94%) |
| PWs     | 1,353 (94%) |
| LA diameter | 1,344 (93%) |
| LVOT diameter | 1,363 (95%) |
| **Spectral-Doppler** |         |
| AV VTI  | 1,355 (94%) |
| AV max velocity | 1,358 (94%) |
| E wave  | 1,366 (95%) |
| A wave  | 1,326 (92%) |
| Deceleration time | 1,360 (95%) |
| **Tissue-Doppler** |         |
| e' septal | 1,359 (95%) |
| a' septal | 1,320 (92%) |
| s' septal | 1,362 (95%) |
| e' lateral | 1,360 (95%) |
| a' lateral | 1,321 (92%) |
| s' lateral | 1,361 (95%) |
| E/e'    | 1,337 (93%) |
| **3DE** |             |
| QLAB EF, EDV, ESV | 924 (92%) |
| QLAB LV mass | 897 (89.6%) |
| **3D-STE** |      |
| GLS, GCS | 529 (53%) |
| Twist and rotations | 529 (53%) |
| **Vascular** |    |
| cIMT    | 1,331 (92.5%) |
| Central SBP and DBP | 1,316 (91.5%) |
| Aix,    | 1,316 (91.5%) |
| Total CACS | 1,203 (83.7%) |
| PWV     | 1,054 (91%) |

*See text in the manuscript for details.

In the original article, there was an error. A correction has been made to Abstract, Results:

Conventional echocardiography and all vascular measurements showed high feasibility (>90% analyzable of clinic attendees), but 3D-echocardiography (3DE) and 3D-STE were less feasible (71% 3DE acquisition feasibility and 38% 3D-STE feasibility of clinic attendees).

In the original article, there was an error. A correction has been made to Results, Echocardiography, Paragraph Number 1:

3DE was acquired in 71% of all clinic attendees and, using QLAB, 924 (92%) had successful volumetric analysis and 897 (89.6%) had LV mass calculated. The difference in these numbers reflects difficulties in tracking the epicardium compared to the endocardium. Fifty three percent of those who had 3DE datasets had 3D deformation measurements by TomTec.

In the original article, there was an error. A correction has been made to Results, Echocardiography, Paragraph Number 2:

Broadly similar trends were observed in men (P < 0.0001, n = 768) and women (P = 0.005, n = 233); however, in South Asians, there were more women with unreadable 3D images compared to men (67 vs. 58%, Figure 2).

In the original article, there was an error. A correction has been made to Discussion, Paragraph Number 1:

By contrast, 3DE had ~71% acquisition feasibility, while 3D-STE feasibility was highly influenced by image quality and only half of the datasets could be analyzed.

The authors apologize for this error and state that this does not change the scientific conclusions of the article in any way. The original article has been updated.

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### Echocardiography

- **N=1438 (attended the clinic)**
  - N=37 (no 3D probe)

#### 3D Echocardiography (3DE)
- N=1001 (acquired 3DE datasets)
  - Unacceptable images for strain analysis (n=253)
  - Major stitching artefacts (n=57)
  - Low frame rate < 10 (n=6)
  - Poor ECG signal (n=3)
  - Out of sector images (n=4)
  - Missing (n=3)
  - More than one of the above (n=146)

- Performed 3D-STE analysis (TomTec): N=529
- Performed 3DE volumetric analysis (Philips): N=924
- Performed 3DE LV mass analysis (Philips): N=897

#### Conventional Echocardiography
- 2D measures: N=1344 – 1363
- Spectral Doppler measures: N=1326 – 1366
- Tissue Doppler measures: N=1320 – 1361

### Vascular

- **N=1438 (attended the clinic)**
  - N=20 (did not undergo CT scanning)
  - N=244 (broken device period)

#### CT Scanning (CACS)
- N=215 (Had previous coronary interventions)
- N=1203 (measured CACS)

#### Pulse wave velocity (PWV)
- N=36 (unable to acquire due to other reasons)
- N=1158 (acquired)
- N=1054 (acceptable traces)

- Carotid artery ultrasound: N=1331
- Central blood pressure: N=1316