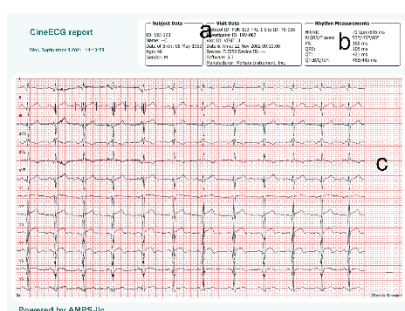


# Working with the CineECG report

## A CineECG tutorial version: 04 | 2022

The CineECG report has three pages:

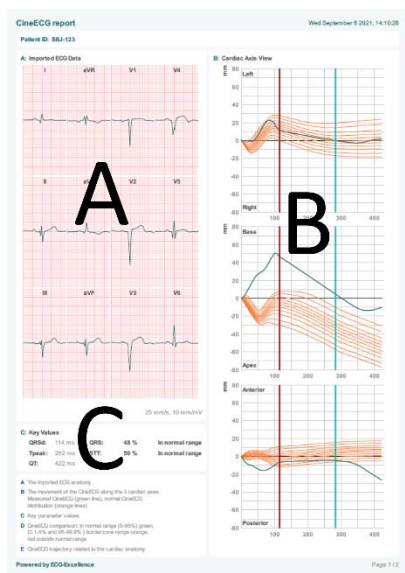


Page 1 has 3 segments.

**Segment a** shows the generic data which has been part of the uploaded data set and is used for patient identification by the user of CineECG.

**Segment b** shows standard analytic results regarding the heart rhythm data. The data is generated by the BRAVO algorithm from AMPS-llc. Within the scientific section of the CineECG.com website the scientific base of the BRAVO algorithm is detailed

**Segment c** shows the rhythm strips for each of the 12 leads as uploaded.



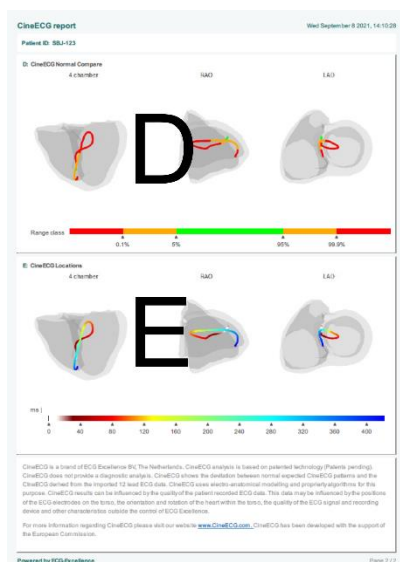
Page2 has 4 segments.

**Segment A** shows the median beat of the recorded ECG data which has been uploaded by the user. These 12 QRS-T complexes are presented in the standard lead-order.

**Segment B** shows the derived CineECG based on the median beat ECG data. CineECG views are along 3 cardiac axes, left-right, base-apex and anterior posterior. Orange trajectories are averaged over 6500 normal ECGs (PTB XL database(1)) from different age groups and are for reference only(2).

**Segment C** shows some ECG de- and repolarization values and the percentage that falls within the normal range, based upon the position of the blue line with respect to the orange line(s)

Finally, the page shows the legend for the CineECG report



Page 3 has 3 segments

**Segment D** shows the CineECG electrical pathway of the median ECG beat through the heart. The color of the pathway indicates if the uploaded electrical pathway is in line within the CineECG pathway range of normal healthy ECG's. The color green indicates alignment with 90% of the normal values per time sample, amber indicates a value outside the normal values but with the 99.9% range, and the red color when the CineECG is outside the range of normal values.

**Segment E** again shows the CineECG in the 3 standard cardiac views. Where the black/white part indicates the onset QRS of the CineECG position in the heart, the red color the QRS CineECG trajectory, the orange color up to 120 ms (maximum normal QRS duration) and the yellow/cyan/blue part the STT segment CineECG trajectory of the median beat. Finally, the page contains generic information regarding CineECG and provides a link to the CineECG.com website

#### CineECG References:

1. Wagner P, Strodthoff N, Busseljot RD, Kreiseler D, Lunze FI, Samek W, et al. PTB-XL, a large publicly available electrocardiography dataset. *Sci Data*. 2020;7(1):154.
2. van Dam PM, Boonstra M, Locati ET, Loh P. The relation of 12 lead ECG to the cardiac anatomy: The normal CineECG. *Journal of Electrocardiology*. 2021;69:67-74.