## Digital Breast Tomosynthesis (DBT): Synthetic 2D Mammograms ("C-View™")

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European Congress of Radiology (ECR) ECR Satellite Symposium, Vienna, March 3, 2012

## SUMMARY OF CLINICAL PRESENTATION

- 2D mammography is still used with tomosynthesis for the following reasons:
  - to maximize micro-calcifications detection,
  - to aid in the transition from 2D to tomosynthesis,
  - to help in comparison with priors.
- C-View is a roadmap of the important features from tomosynthesis slices, and used to substitute for 2D, without requiring the radiation dose of 2D, when combined with tomosynthesis.
- Oslo tomosynthesis screening trial:
  - Ongoing prospective study in population-based screening program.
  - Preliminary results presented at RSNA 2011: Independent double reading
    - 2D double reading: 24 of 35 cancers (cancer detection rate = 0.72%)
      - 2D single reading: 20 of 35 cancers = 57%
      - 2D + CAD single reading: 21 of 35 cancers = 60%
    - 2D + tomosynthesis double reading: 34 of 35 cancers (cancer detection rate = 0.97%)
      - 2D + tomosynthesis single reading: 29 of 35 cancers = 83%
      - C-View + tomosynthesis single reading: 27 of 35 cancers = 77%
  - Reading time with tomosynthesis is higher (+ 45 seconds in comparison with 2D alone), but acceptable in a high-volume screening program.

## CONCLUSION

The use of tomosynthesis in screening increases the cancer detection rate (relatively 35-45% based on preliminary results) compared with standard 2-View 2D.

