

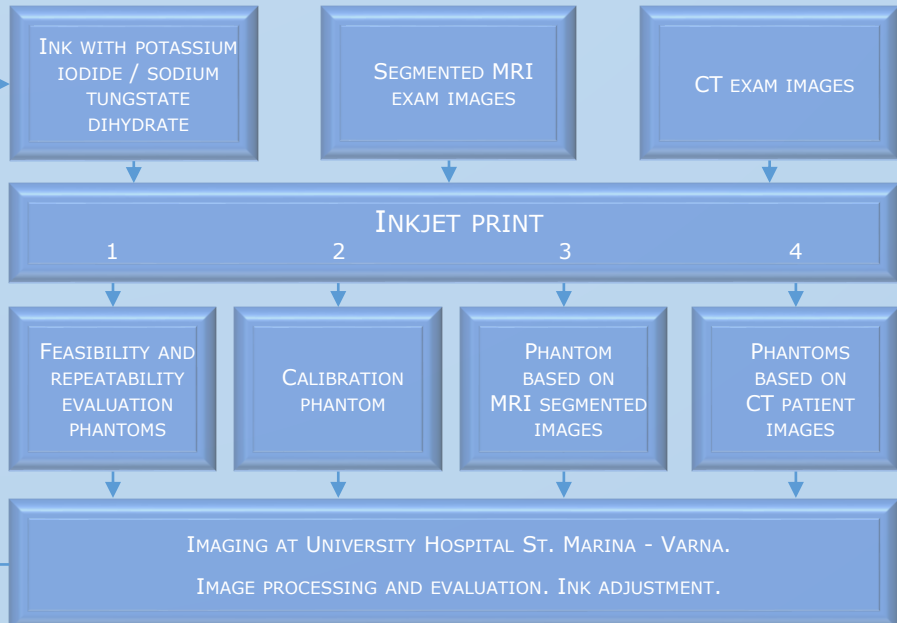
# USE OF X-RAY CONTRAST MATERIALS WITH INKJET PRINTING FOR CREATION OF BREAST ANTHROPOMORPHIC PHANTOMS

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## AIM

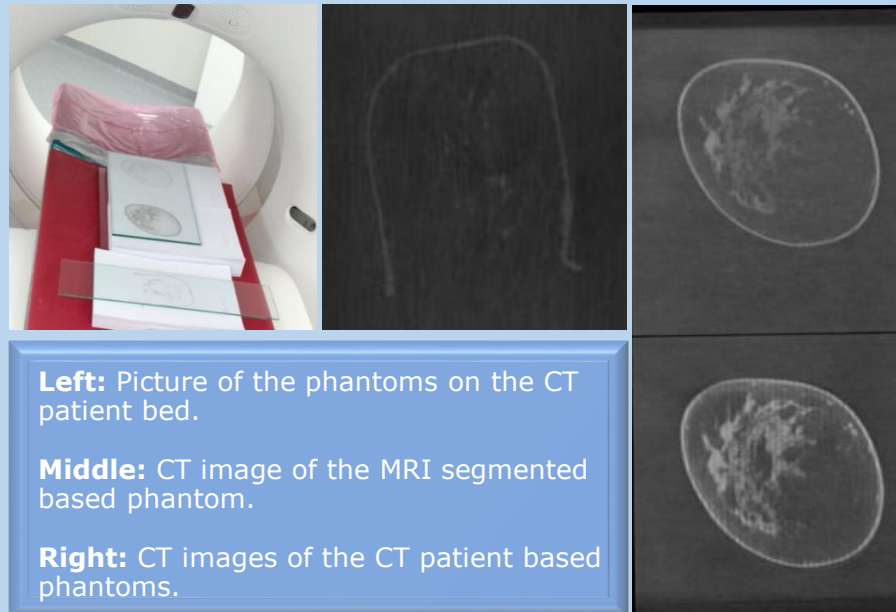
To evaluate the suitability of two materials – potassium iodide and sodium tungstate dihydrate for creation of radiology phantoms using inkjet printing.

## MATERIALS AND METHODS



## RESULTS

- ❖ Identical image patterns on different phantoms.
- ❖ Representations of the different tissue structures.
- ❖ Hounsfield Units values are realistically represented.



**Left:** Picture of the phantoms on the CT patient bed.

**Middle:** CT image of the MRI segmented based phantom.

**Right:** CT images of the CT patient based phantoms.

## CONCLUSION

- In-house developed ink mixtures can be used to replicate radiology characteristics of the breast tissues.
- The inkjet printing technology is suitable for manufacturing of anthropomorphic phantoms.

## ACKNOWLEDGEMENTS

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