For	office	use	only

Grant ID:



# **College of Radiographers Industrial Partnership Research Grants**

# **Final Report Form**

Please use the tab key to move to next question

1. Principal Investigator	Miss Corrinne Brooks
2. Project Title	Genitalia contouring in anal cancer for intensity modulated radiotherapy; Comparison of dosimetric outcomes for genitalia volumes with and without the guide of a genitalia atlas.
3. Amount of Grant	6340.6

#### 4. Did you spend the money as indicated in your proposal (if not why)?

Money was used for time release as indicated in the proposal. However, due to ill health the project was extended and I was unable to attend ESTRO 2015 conference but will attend in April 2016. I will also be attending the SOR Annual Radiotherapy Conference in January 2016.

#### 5. Did you reach your intended project outcomes (if not why)?

Yes new genitalia dose constraints in anal cancer IMRT have been established that are gender and tumour stage specific. These dose constraints were established using a new genitalia contouring atlas that allowed reproducible and consistent genitalia contours to be demarcated thus the genitalia contouring atlas can be recommended for clinical use.

### 6. What are your significant findings?

Upon application of the new genitalia contouring atlas in anal cancer IMRT it was found that:

- The new genitalia contours were significantly larger than those defined by clinicians.
- The volume of genitalia receiving 20 and 30 Gy was significantly increased for new genitalia contours.
- Original and new genitalia contours failed to meet the current genitalia dose constraints apart from the genitalia contours in the male node negative subgroup.
- Female genitalia received significantly more radiation than male genitalia.
- Patients with involved nodal disease received significantly more genitalia irradiation than patients without involved nodal disease.
- Current genitalia dose constraints are inappropriate and new genitalia dose constraints have been derived upon application of the new genitalia contouring atlas that are gender and tumour stage specific.

#### 7. Have you submitted the work for publication (if so where)?

A draft has been written for a full paper for the *International Journal of Radiation, Oncology, Biology and Physics*. A draft technical report has also been written for publication for *Radiography*.

### 8. Have you presented the work at a national/international event (if so where)?

Work will be presented at the Annual Radiotherapy Conference January 2016 and ESTRO April 2016.

# 9. Please provide an executive summary of your work (two sides of A4 maximum) N.B. If you already have a draft or final version of the proposed publication can you please attach See attached.

## 10. Return of application form

Please return this form to:

Valerie Asemah, The Society & College of Radiographers, 207 Providence Square, Mill Street, London, SF1 2FW

Or by email at ValerieA@sor.org