3. What is your IMRT planning system? _____ Version No. _____

4. Is your treatment planning system capable of transferring a patient's beams to a QA phant
☐ yes ☐ no

If no, how do you verify the dose distribution

_____

_____

_____

☐ head and neck
☐ prostate
☐ 1 1Td (628.5 504 0.75 re f BT /TT1 Tf 102.75 547.e Td ( )Tj -504 -13.5 T266 12 Tf -66 12Tc e.e Tj 0 6

12j 0 T244 150 685.5 9.75 9.75 re S BT 2062

j.

e. How are patients immobilized for these treatments? _____

_____

f. What PTV margins do you usually use for this site? _____mm

g. To what isodose line are IMRT treatments for these patients commonly prescribed (relative to maximum dose)?

☐ 95% ☐ 90% ☐ 85% ☐ 80% ☐ other _____

_____

h. How do you verify field positioning relative to the patient'p22natomy?

☐ orthogonal films

☐ beam films using a jaw setting that enclos

in _____ (#) axial planes

& in _____ (#) sagittal planes

& in _____(#)coronal planes

c. Type of QA phantom:

☐ anthropomorphic phantom Vendor: _____

☐ geometric phantom: _____(material)

shape: ☐ square ☐ cylinder ☐ o t h e r _ _ _ _

size of phantom _____cm X _____cm X ___ cm

d. For this measurement

☐ the patient's beams are transferred to the QA phantom by the planning system.

☐ the patient's beams are not transferred to the QA phantom in software, but an anthropomorphic phantom is used to simulate approximate patient geometry for dose measurements.

e. What agreement between planned and measured doses for individual patients is considered acceptable at your institution?

For absolute dose in target volume (high dose) region _____

For absolute dose in critical normal tissue region _____

For absolute dose in low dose region _____

For relative dose in high dose gradient region _____

For relative dose in low dose gradient region

in high dose region (target) _____

in low dose region _____

f. Wre your monitor unit calculations checked by an independent program?

☐ no ☐ yes Vendor:

b. RTOG institutions and institutions choosing to satisfy the benchmark requirement with an RPC

BENCHMARK CASE:

Patient Data Selection:

in the head region or in the pelv
from your institution shall be used. The image data set shall extend at leas
superiorly/inferiorly with slice thickness no greater than 3 mm. The geometry of t
volume (PTV) and the organ at risk (OAR) is

For “step and shoot” and “sliding window” techniques the treatment plan shall consist of beams from at least 4 and not more than 9 gantry angles. Tomotherapy and other dynamic arc treatments (e.g. RapidArc and VMAT) shall be deliv