**Appendix 1**

**Questionnaire on the effect of the CVH deformable model in radiotherapy**

This questionnaire was specially formulated to understand the practical application effect and satisfaction of the CVH deformable model in clinical radiotherapy more comprehensively. It is expected to provide the basis for the subsequent improvement in the model through investigation and finally meet the needs of clinical radiotherapy to a greater extent.

1. Questionnaire description:

(1) This questionnaire is concise and easy to answer.

(2) You can fill in this questionnaire anonymously. The letters involved in this questionnaire will be strictly confidential, so you can answer with confidence.

(3) Please answer according to the actual situation; otherwise, it may affect the accuracy of the survey results.

2. Background information: Please tick "√" in front of the corresponding item according to the actual situation.

|  |  |  |  |
| --- | --- | --- | --- |
| Radiotherapy center | Xinqiao Hospital | Date of filling | Y M D |
| Title |  | Gender | □Male □Female |
| Age | □Under 25 years □26-35 years □36-45 years □Above 46 years | | |
| Education | □Junior College □Undergraduate □Master’s □Doctor | | |
| Department | □Oncology □Radiology □Surgery □Internal medicine | | |

3. Select the most appropriate answer by ticking "√"

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Delineating/identifying parts (not completely and clearly delineated on CT)** | **Very clear (5 points)** | **Clear (4 points)** | **Uncertain (3 points)** | **Unclear (2 points)** | **Very unclear (1 point)** |
| Eyeball | A | B | C | D | E |
| Lens | A | B | C | D | E |
| Brainstem | A | B | C | D | E |
| Spinal cord | A | B | C | D | E |
| Inner ear | A | B | C | D | E |
| Pharyngeal cavity | A | B | C | D | E |
| Pharyngeal constrictor | A | B | C | D | E |
| Parotid gland | A | B | C | D | E |
| Temporal lobe | A | B | C | D | E |
| Optic nerve | A | B | C | D | E |
| Optic chiasm | A | B | C | D | E |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Parts with an improved delineation effect of the threatened organ in the head and neck in radiotherapy after CVH image registration and fusion** | **Very obvious (5 points)** | **Obvious (4 points)** | **Uncertain (3 points)** | **Unobvious**  **(2 points)** | **Very unobvious**  **(1 point)** |
| Eyeball | A | B | C | D | E |
| Lens | A | B | C | D | E |
| Brainstem | A | B | C | D | E |
| Spinal cord | A | B | C | D | E |
| Inner ear | A | B | C | D | E |
| Pharyngeal cavity | A | B | C | D | E |
| Pharyngeal constrictor | A | B | C | D | E |
| Parotid gland | A | B | C | D | E |
| Temporal lobe | A | B | C | D | E |
| Optic nerve | A | B | C | D | E |
| Optic chiasm | A | B | C | D | E |

In addition, what are your personal needs for radiotherapy? Or what are your opinions or suggestions regarding the existing model?