

## SUPPLEMENTS

**Supplementary Table 1.** Questionnaire

Question	Response
1. What is your age?	20–29 years 30–39 years 40–49 years 50–59 years > 60 years
2. What is your gender?	Male Female
3. How many years have you been practicing as a neuroradiologist?	< 5 5–10 10–20 20–30 > 30
4. In what type of hospital do you work?	Academic Non-academic Remote reading
5. What is your professional title?	Professor Fellow Not affiliated with a university
6. Have you ever received any lectures or training related to AI?	Yes No
7. Have you ever conducted research related to AI?	Yes No
8. How much do you agree with the question “I feel familiar with AI programs”?	Strongly agree Agree Neither agree nor disagree Disagree Strongly disagree
9. Do you agree that AI is currently helpful in healthcare?	Strongly agree Agree Neither agree nor disagree Disagree Strongly disagree
10. Do you think AI could replace the role of a radiologist in the future?	Strongly agree Agree Neither agree nor disagree Disagree Strongly disagree
11. How long do you think it will take for AI to be useful in practice?	< 5 years 5–10 years 10–20 years > 20 years
12. Do you think AI will pose a threat to the role of radiologists?	Strongly agree Agree Neither agree nor disagree Disagree Strongly disagree
13. How much do you think AI will be able to play the role of a radiologist in 10 years?	All Most of In some degree A little None
14. How do you think using AI in the future will help a radiologist? Choose two options that you think are the most relevant.	Helps increase reading accuracy and reduce errors Reduces time spent on repetitive tasks Helps establish consistent diagnosis and treatment policies Assists in evidence-based decision making Reduce the cost Helps to exclude of patients with normal findings Etc.
15. As a radiologist, how prepared do you feel introducing AI?	Very well In some degree Neither yes nor no A little None
16. What concerns you most about the introduction of AI? Choose two options that you think are the most relevant.	Reducing the role of radiologists Incorrect decision making due to machine error Security and privacy issues for medical information Questions about the basis of AI’s judgment AI development companies take the lead in healthcare Etc.
17. Are you willing to purchase AI software or request a purchase to your hospital?	Never purchased before and never will Never purchased before, but have intention to buy in the future Have purchased before, but have no intention to buy in the future Have purchased before and will continue to buy Don’t know
18. Have you ever used AI software for clinical or research purposes?	Yes No
19. How often do you use AI software?	Everyday At least once a week At least once a month Etc.
20. How many AI software packages have you used?	1 2 3 4 > 5
21. How long have you been using AI software?	< 1 year 1–3 years 3–5 years > 5 years
22. How did you use the AI software (purchase channel)?	Personally bought Purchased in an institution Used demo program Participated in development of program
23. Which AI software have you used? Choose all.	Diagnosis of Alzheimer’s or mild cognitive impairment Detection, classification, and visualization of intracranial hemorrhage Detection, visualization and inference the time of cerebral infarction Measure and analysis of extent of brain tumor Diagnosis of cerebral aneurysm or cerebrovascular stenosis/obstruction Diagnosis of Parkinson’s disease Etc.
24. Which AI software needs the most improvement or development?	Diagnosis of Alzheimer’s or mild cognitive impairment Detection, classification, and visualization of intracranial hemorrhage Detection, visualization and inference the time of cerebral infarction Measure and analysis of extent of brain tumor Diagnosis of cerebral aneurysm or cerebrovascular stenosis/obstruction Diagnosis of Parkinson’s disease Etc.
25. Do you agree that current AI software helps you make clinical decisions?	Strongly agree Agree Neither agree nor disagree Disagree Strongly disagree
26. In a situation where radiologists are unavailable, do you think that AI software can help clinicians make decisions?	Strongly agree Agree Neither agree nor disagree Disagree Strongly disagree
27. In what ways do you think AI software is helpful?*	Improving accuracy Reduced reading time Ensuring consistency Research applicability
28. Do you think that coordination between radiologists is essential to improve the performance of AI software?	Strongly agree Agree Neither agree nor disagree Disagree Strongly disagree
29. Do you agree that AI programs are useful in classifying normal and abnormal findings so that radiologists only read images classified as abnormal?	Strongly agree Agree Neither agree nor disagree Disagree Strongly disagree
30. Do you think it is essential to incorporate AI into the curricula of medical schools and hospital training?	Strongly agree Agree Neither agree nor disagree Disagree Strongly disagree

Questions asked in an online survey regarding artificial intelligence (AI). The answers to questions 8–10, 12, 15, 25, 26, and 28–30 were assessed using a five-point Likert scale (1 = strongly disagree to 5 = strongly agree). \*For each question, participants were asked to choose from five options: very helpful, helpful, neither yes or no, little helpful, and not helpful

**Supplementary Table 2.** Subgroup Comparison on the Attitude toward Artificial Intelligence in 73 Respondents

	Feeling of Familiarity	Feeling of Being Prepared	Posing a Threat to the Job	Current Usefulness	Expectation of Replacing a Radiologist in the Future
Age <sup>†</sup>	0.141 (3 vs. 3)	0.175 (2 vs. 3)	0.313 (3 vs. 3)	0.553 (4 vs. 4)	0.029* (2 vs. 3)
Sex <sup>‡</sup>	0.161 (3 vs. 3)	0.146 (3 vs. 2)	0.373 (4 vs. 3)	0.375 (4 vs. 3)	0.156 (3 vs. 3)
Years of practice <sup>§</sup>	0.833 (3 vs. 3)	0.761 (2 vs. 3)	0.085 (3 vs. 3)	0.879 (4 vs. 4)	0.011* (2 vs. 4)
Type of hospital <sup>  </sup>	0.198 (3 vs. 2)	0.043* (3 vs. 2)	0.456 (3 vs. 4)	0.001* (4 vs. 2)	0.793 (3 vs. 4)
Type of position <sup>¶</sup>	0.441 (3 vs. 3)	0.088 (3 vs. 2)	0.888 (3 vs. 4)	0.176 (4 vs. 3)	0.822 (3 vs. 3)

The number in parentheses is the median value of each group. Data are *P* values with the results with nominal *P* < 0.05 are asterisked (\*), <sup>†</sup>Age group was divided into group with younger than 40 years old versus over 40 years old, <sup>‡</sup>In sex, the former is male and the latter female, <sup>§</sup>Year of practice was divided into group with less than 10 years of experience versus more than 10 years, <sup>||</sup>Type of hospital was divided into academic versus non-academic hospital, <sup>¶</sup>Type of position was divided into professor versus non-professor