**Фамилия переводчика \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Направление перевода: Английский->Русский**

**Предметная область: *лучевая диагностика***

***Примечание 1:*** *Необходимо сделать перевод приведенного ниже фрагмента текста*

***Примечание 2:*** *Перевод текста размещается в соответствующий столбец*.

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| We analyzed the CCTA data of 543 unselected consecutive patients with suspected CAD. The median effective radiation dose was 0.88 mSv (IQR, 0.6-1.4 mSv) with diagnostic image quality in 99% of patients, verifying that sub-millisievert radiation doses are possible in unselected, real-world patients undergoing CCTA. |  |
| A number of integrated strategies were used to achieve this consistently low dose, including; prospective ECG-gated acquisition, lowest possible tube current and voltage, IR (AIDR3D) and meticulous attention to patient preparation, both pre scan (heart rate control) and during the scan (reduction in volume of coverage to minimal size possible whilst allowing complete acquisition in a single volume. |  |
| BMI-adapted tube voltage and current work synergistically with AIDR3D to reduce image noise while achieving a 75% radiation dose reduction relative to a scan reconstructed with filtered back-projection[16]. Patient irradiation is further limited by decreasing the craniocaudal field of view to the minimum required following analysis of the scout view[17]. |  |
| We achieved comparable X-ray doses in our real world population to Chen *et al*[19] using a 320-detector CT scanner despite a slower gantry rotation speed ( 35,0 ms *vs* 275 ms due to the aggressive measures to control heart rate, with 65% of patients receiving b-blockers [either oral only (15%), iv only (27%) or both (23%)] and 85% of patients achieving a heart rate < 65 bpm. Moreover, we have demonstrated what we believe is the lowest ever-recorded effective dose of 0.18 mSv with a subjective image quality score of 4 (“excellent”) from a study of real-world unselected patients. |  |
| This study did not include patients with atrial fibrillation or other cardiac CT indications such as evaluation of coronary bypass grafts, evaluation of left atrium anatomy prior to atrial fibrillation ablation, pre-operative assessment for trans-catheter aortic valve replacement or assessment of cardiac function. |  |