

Supplementary Methods

1. Computed tomography acquisition

All patients underwent multiphasic computed tomography (CT) imaging, including pre-contrast, arterial, portal-venous, and delayed-phase imaging, using multidetector CT scanners as follows: 16 detector rows (n=19), 64 detector rows (n=255), 128 detector rows (n=82), and 256 detector rows (n=9). The scanners were manufactured by GE HealthCare (n=93), Philips Healthcare (n=29), and Siemens Healthineers (n=243). All CT examinations were met the essential requirement for CT imaging acquisition protocols to evaluate intrahepatic cholangiocarcinoma [1-3].

References

1. Sainani NI, Catalano OA, Holalkere NS, Zhu AX, Hahn PF, Sahani DV. Cholangiocarcinoma: current and novel imaging techniques. *Radiographics*. 2008;28:1263-87.
2. Joo I, Lee JM, Yoon JH. Imaging diagnosis of intrahepatic and perihilar cholangiocarcinoma: recent advances and challenges. *Radiology*. 2018;288:7-13.
3. Kierans AS, Costello J, Qayyum A, Taouli B, Venkatesh SK, Yoon JH, et al. Imaging cholangiocarcinoma: CT and MRI techniques. *Abdom Radiol (NY)*. 2025;50:94-108.