**Supplementary table 1: Questions in the survey**

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| **Question number** | **Contents** |
| 1 | What role do you think TACE should act as in the treatment for HCC? |
| 2 | Do you think THE treatment outcomes of TACE have a high variation? |
| 3 | Which guideline do you think is the most suitable tool to guide TACE treatment? |
| 4 | Which scoring system do you think is the most suitable tool to assess and predict treatment benefit for initial or repeated TACE? |
| 5 | Do you think TACE is still the first choice for intermediate stage HCC? |
| 6 | Do you think TACE combined with other approaches could achieve a better treatment outcome? |
| 7 | Do you think there is a need to subgroup the intermediate stage HCC in the current guidelines? |
| 8 | Which subgroup do you think is the most suitable tool for intermediate stage HCC? |
| 9 | Which of the following variables do you think affect the treatment outcome of TACE? (multiple answers allowed) |
| 10 | What are the diameters of the target lesions that you think would make it hard to achieve a satisfactory tumor response after TACE? |
| 11 | What is the number of the target lesion(s) that you think would make it hard to achieve a satisfactory tumor response after TACE? |
| 12 | Which of the following variables do you think would predict unsatisfactory treatment outcomes of TACE? (multiple answers allowed) |
| 13 | Which criteria do you think is the most suitable tool to assess the tumor response after TACE? |
| 14 | At least how many session(s) of TACE do you think should be performed before assessing comprehensive the treatment outcome? |
| 15 | Which of the following definition of TACE failure/refractoriness do you think is most reasonable? |
| 16 | Do you agree that repeated TACE should be performed if sufficient tumor necrosis did not achieve after previous super-selective TACE? |
| 17 | If you choose “Yes” in Q16, what’s the percentage of the residual tumor that would make you to trigger the next TACE session? |
| 18 | Do you think TACE failure/refractoriness should be defined as “two consecutive insufficient responses of the target tumor occur” ? |
| 19 | If you choose “No” in Q18, which treatment method should you considered for the unsatisfactorily controlled target lesion(s)? |
| 20 | How many consecutive times of insufficient responses of the target tumor do you think should be defined as TACE failure/refractoriness? |
| 21 | Do you think new intrahepatic lesion(s) should be considered as TACE failure/refractoriness? |
| 22 | If you choose “Yes” in Q21, how many consecutive times of the occurrence of intrahepatic lesion(s) do you think should be defined as TACE failure/refractoriness? |
| 23 | If you choose “No” in Q21, which treatment method should be considered for the new intrahepatic lesion(s)? (multiple answers allowed) |
| 24 | If segmental portal vein tumor thrombosis (PVTT) occurs with preserved liver function (Child-Pugh A/B) after previous TACE, will you continue applying TACE to control intrahepatic lesion(s)? |
| 25 | If you choose “Yes” in Q24, which combination therapy would you consider to control PVTT? (multiple answers allowed) |
| 26 | If extrahepatic spread occurs with preserved liver function (Child-Pugh A/B) after previous TACE, will you continue applying TACE to control intrahepatic lesion(s)? |
| 27 | If you choose “Yes” in Q26, which combination therapy should be considered to control extrahepatic spread? (multiple answers allowed) |
| 28 | Do you think continuous elevation of tumor markers, such as alpha fetoprotein and protein induced by vitamin K bbsence or Antagonist-II immediately after TACE should be considered as TACE failure/refractoriness? |
| 29 | Do you think the concept of “TACE failure/refractoriness” has its scientifical and clinical significance? |
| 30 | If you choose “Yes” in Q29, which treatment method do you prefer to perform after TACE failure/refractoriness? |
| 31 | Do you think it is necessary to re-define the concept of “TACE failure/refractoriness” targeting for Chinese HCC? |
| 32 | Do you think the number of TACE sessions will decrease in clinical practice in the future? |
| 33 | Do you think the technique of TACE will be improved in the future? |
| 34 | If you choose “Yes” in Q33, which aspects of TACE technique will be improved? (multiple answers allowed) |

TACE, transarterial chemoembolization; HCC, hepatocellular carcinoma; PVTT, portal vein tumor thrombosis.