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PREPARE-2022CN815

Expert consensus on clinical practice of fusion genes detection in non-small cell lung cancer in China (2023 version)

Molecular Pathology Collaboration Group of Tumor Pathology Committee of China Anti-Cancer Association, Chinese Medical Association Chinese Society of Oncology, Pathology Quality Control Center

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Practice guideline registration: Practice Guideline Registration for Transparency, PREPARE-2022CN815

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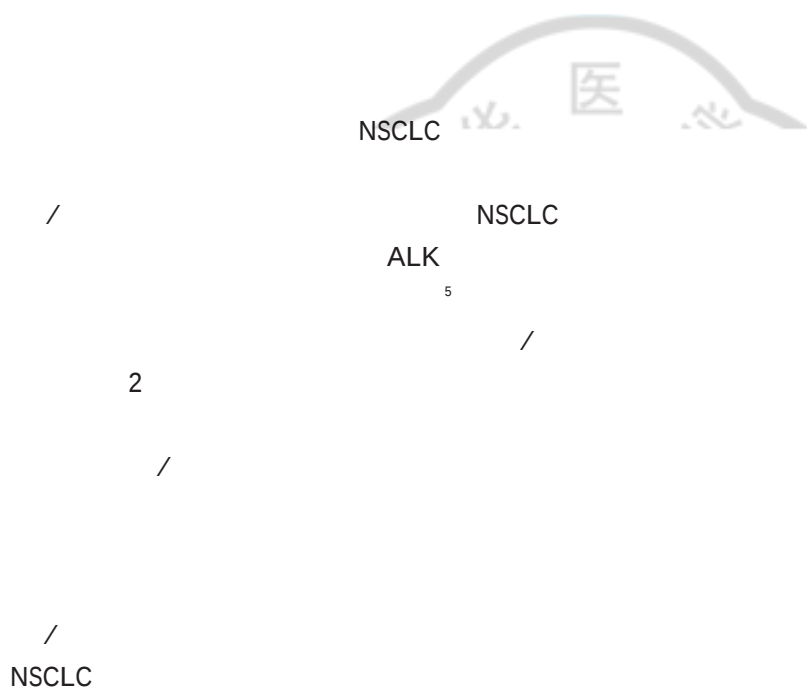
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RNA
 DNA
 DNA
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 NSCLC
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 NSCLC
 6
 qRT-PCR
 FISH
 7
 IHC
 IHC
 RET
 1.ALK ALK
 1
 ALK
 19
 ALK
 20
 18 / ALK
 EML4-ALK
 20
 EML4-ALK
 60%
 1 EML4 13
 3 EML4
 6
 ALK 20
 EML4-ALK TKI
 19 / ALK
 IHC FISH qRT-PCR
 Ventana-D5F3 IHC
 20
 / ALK
 alternative transcription initiation
 ALK IHC
 TKI 21
 DNA RNA
 ALK
 NanoString
 /
 2.ROS1 ROS1
 1
 CD74 EZR 22 /
 ROS1 ROS1 30~34
 23
 ROS1 36~
 41 22 / ROS1 FISH -
 qRT-PCR IHC
 24 / FISH ROS1

GOPC ROS1
 GOPC-ROS1
 6
 GOPC-ROS1
 FISH
 DNA RNA
 DNA
 ROS1
 1 ROS1
 2
 GC
 3
 AT
 26 /
 3.RET RET
 1
 NSCLC KIF5B
 7 / RET
 11
 3'
 12~
 FISH -
 19 7 27 / RET
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 /
 FISH NCOA4-RET
 NCOA4 RET DNA
 28 /
 4.NTRK NTRK
 NSCLC
 NTRK1 -
 <1% / NTRK
 NTRK2 NTRK3 TrkA TrkB TrkC
 3 3 NTRK
 13~18 29 / NTRK
 8~13 3'
 30 / NSCLC NTRK1
 TPM3 NTRK1

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2.FGFR FGFR FGFR1 FGFR2⁻
 FGFR3 FGFR4
 3'FGFR
 FGFR 5'
 5'FGFR
 36 / FGFR
 1 / NSCLC
 90%
 17~
 37 / FGFR
 19 NSCLC
 DNA RNA
 3.
 MET⁻ HER2⁻ BRAF⁻ TKI
 1 MET³⁸⁻⁴⁰
 2 EGFR⁴¹ 3 BRAF⁴²
 DNA RNA
 9
 NSCLC
 qRT-PCR
 NSCLC
 1 /

32 /
 8
 /
 1.NRG NRG1 NSCLC
 1
 CD74³⁴ / NRG1 3 ~
 NRG1 5' /
 NRG1 1 2
 47 kb 2
 2 955 kb 3 5
 6
 111 kb³⁴ / NRG1
 HER3 NRG1
 NRG1 HER3
 HER3/HER2
 / NRG2
³⁵ / FISH⁻ qRT-PCR IHC
 NRG1/2
 NRG1/2 NSCLC
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 DNA RNA NRG1/2
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³⁵ /

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NSCLC

DNA ALK⁻

ROS1⁻ RET⁻ NTRK⁻

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RNA

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qRT-PCR

/ IHC ALK

ALK Ventana-D5F3 IHC /

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FISH IHC

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RET⁻

ROS1⁻ ALK⁻ FGFR⁻ NTRK⁻

EGFR TKI NSCLC

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NSCLC IHC ALK⁻

qRT-PCR

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