Identifying Potential Challenges During the Diagnostic Journey









Biopsy	Processing	Ordering
Do you work collaboratively with the MDT to identify lesions to sample and potentially assess for tissue adequacy? ³	Do you consistently limit cold ischemia time? ³ Yes No	Have you established a common language with consister terminology between other members of the MDT? ^{9,10} Yes No
☐ Yes ☐ No	Do you consider downstream testing when choosing fixation methods? ³ Yes No	Have you considered minimizing the number of available testing platforms at your institution? ¹²
	Do you divide tissues into more than 1 cassette? ³ Yes No	When was the last time you reviewed and incorporated recommendations from published guidelines into your SOPs and institution forms? ¹¹ Date(s):
	Do you perform microdissections to remove non-tumor or necrotic tissue? ^{3,6} Yes No	

Testing
Have you checked the testing limitations for all assays? ¹⁰ Yes No
How is fusion testing performed at your institution? ¹⁰
Do you consistently have biomarker test results available by your patients first visit? ¹⁵ Yes No
At your institute, are the reports readable and searchable across platforms? ¹⁸ Yes No
At your institute, has your EHR been updated to be compatible with your LIS (or vice versa)? ¹⁸ Yes No

Are precision oncology knowledge
databases accessed when needed
to assess which alterations are
clinically actionable? ¹⁰

Yes

No

Do you use synoptic style reporting in your pathology reports?18,21

	Yes
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 N	0

Do you use headlines to emphasize key findings in your pathology reports?18

- Yes
- 🗌 No

Yes

Are pathology reports linked to all addendum reports in the EHR at your institution?18

	Yes
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	No
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Do clinicians receive notifications when an addendum report has been entered?18

	Yes
_	

🗌 No

CAP, College of American Pathologists; EHR, electronic health record; LIS, laboratory information system; MDT, multidisciplinary team; ROSE, rapid on-site evaluation; SOPs, standard operating procedures.

REFERENCES

1. Roberts MC et al. *JCO Precis Oncol.* 2021;5:701-709. **2**. Bhamidipati D et al. *NPJ Precis Oncol.* 2021;5(1):94. **3**. De Las Casas LE, Hicks DG. *Am J Clin Pathol.* 2021;155(6):781-792. **4**. Roy-Chowduri S et al. *Arch Pathol Lab Med.* 2020;144(8):933-958. **5**. Costa C et al. *Cancer Cytopathol.* 2018;126(9):767-772. **6**. Jennings LJ et al. *J Mol Diagn.* 2017;19(3):341-365. **7**. Plotkin E at al. *J Clin Oncol.* 2019;37(suppl 27):49. **8**. Lubin IM et al. *J Mol Diagn.* 2008;10:459-468. **9**. Martin NA et al. *J CO Precis Oncol.* 2021;5:PO.21.00027. **10**. Chakravarty D et al. *J Clin Oncol.* 2019;37(suppl 27):49. **8**. Lubin IM et al. *J Mol Diagn.* 2008;10:459-468. **9**. Martin NA et al. *J CO Precis Oncol.* 2021;5:PO.21.00027. **10**. Chakravarty D et al. *J Clin Oncol.* 2022;40(11):1231-1258. **11**. Committee on Policy Issues in the Clinical Development and Use of Biomarkers for Molecularly Targeted Therapies; Board on Health Care Services; Institute of Medicine; National Academies of Sciences, Engineering, and Medicine. *Biomarker Tests for Molecularly Targeted Therapies: Key to Unlocking Precision Medicine*. Graig LA, Phillips JK, Moses HL, editors. Washington (DC): National Academies Precess (US); 2016. **12**. El-Deiry WS et al. *CA Cancer J Clin.* 2019;69(4):305-343. **13**. Pennell NA et al. *J CO Precision Oncology.* 2019;3:1-9. **17**. Yu TM et al. *Clin Lung Cancer.* 2019;20(1):20-29. **18**. ACCC CAP Precision Medicine: Integration of Pathology with the Cancer Care Team. https://www.accc-cancer.org/docs/ projects/landscape-of-pathology/pathology-coordinating-reporting.pdf?sfvrsn=fa5ddb9e_2. Accessed November 9, 2022. **21**. CAP Definition of Synoptic Reporting. https://documents.cap.org/documents/synoptic_reporting_definiton_examples_v4.0.pdf. Accessed November 9, 2022. **22**. Valenstein PN. *Arch Pathol Lab Med.* 2008;132:84-94. **23**. Nussinov R et al. *PLoS Comput Biol.* 2019;15(3):e1006658. **24**. Li M et al. *J Mol Diagn.* 2017;19(1):4-23.

SUMMARY



Molecular diagnostics is a multistep process requiring collaboration among distinct disciplines³

Successful biomarker testing depends on key factors:

- Testing tissue of sufficient quantity and quality¹
- Ordering process for actionable biomarkers¹⁰
- Use of appropriate tests¹⁰
- Access to clear and searchable report data¹⁸



Multiple professional societies have developed resources to assist with testing barriers^{9,10,11}

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Novartis Pharmaceuticals Corporation East Hanover, New Jersey 07936-1080

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