



EP12.36: Real-World Management of BRAF V600E-Mutated NSCLC in Italy: Results of a National Oncologist Survey

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INTRODUCTION

- BRAF mutations occur in 2–5% of non-small cell lung cancer (NSCLC), with BRAF V600E representing the most clinically relevant subtype (~1–2%) (1).
- Combined BRAF and MEK inhibition has demonstrated meaningful efficacy in phase II single-arm trials and is recommended as first-line treatment (2).
- Unlike other oncogene-addicted NSCLC, BRAF V600E-mutated tumors are more frequently associated with older age and smoking history, with retrospective evidence suggesting sensitivity to immunotherapy (1, 3).
- Real-world management remains poorly defined.
- This study aimed to evaluate diagnostic pathways and treatment strategies for BRAF-mutated NSCLC in Italy.

METHODS

- A national web-based survey was conducted in 2025 using the Oncoweb platform (www.onconweb.com), targeting medical oncologists practicing in Italy.
- Oncoweb is a multispecialty digital platform; however, this survey was specifically addressed to medical oncologists.
- The platform includes 2,298 oncologists, approximately 300 specializing in thoracic oncology.
- Participants represented different healthcare settings (academic centers, general hospitals, IRCCS and community centers) and levels of experience.
- The survey assessed access to BRAF testing, perceived clinical relevance, and treatment strategies across lines of therapy.
- Descriptive statistics summarized responses.

RESULTS

- A total of 183 oncologists participated; most were specialists (87.4%).
- Access to a multidisciplinary team was reported by 96%.
- BRAF testing was universally available: 69.9% performed testing on site, 93% reported that BRAF testing was accessible to >80% of their patients, and 72.3% routinely tested all patients (Figure 1).
- Among oncologists not testing all patients (n = 50), insufficient tumor material (30.5%) and poor sample quality (24%) were the leading reasons for non-testing, followed by prioritization of other biomarkers (17.5%) (Figure 2).
- Key challenges were pathology-related issues (up to 40%), delays in reporting (23%), insufficient medical and technical staff (17.9% and 17.3%), and limited access to test results (13.1%) (Figure 3).
- Regarding clinical relevance, 70.5% considered BRAF mutations comparable to other actionable biomarkers, while 23.5% perceived them as less impactful.
- After first-line targeted therapy, 89.6% estimated that ≥50% of patients remain eligible for second-line treatment.
 - Chemo-immunotherapy was the preferred strategy (37.7%), followed by platinum-based chemotherapy (25.7%); 20.2% reported no clear preference (Figure 4).
- Compared with other oncogene-driven NSCLC, 68.3% of participants reported greater use of immunotherapy in BRAF-mutated patients. Furthermore, 28.4% would consider reserving targeted therapy for second-line after a first-line chemotherapy/immunotherapy-based strategy.

National oncologist survey, Italy (n=183)

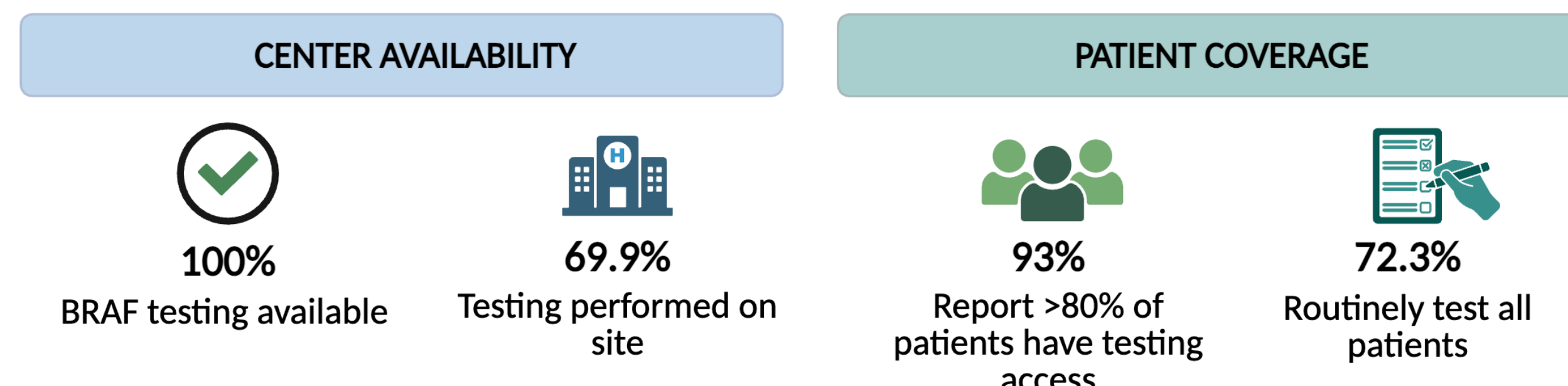


Figure 1. BRAF testing availability and patient coverage across Italian centers.

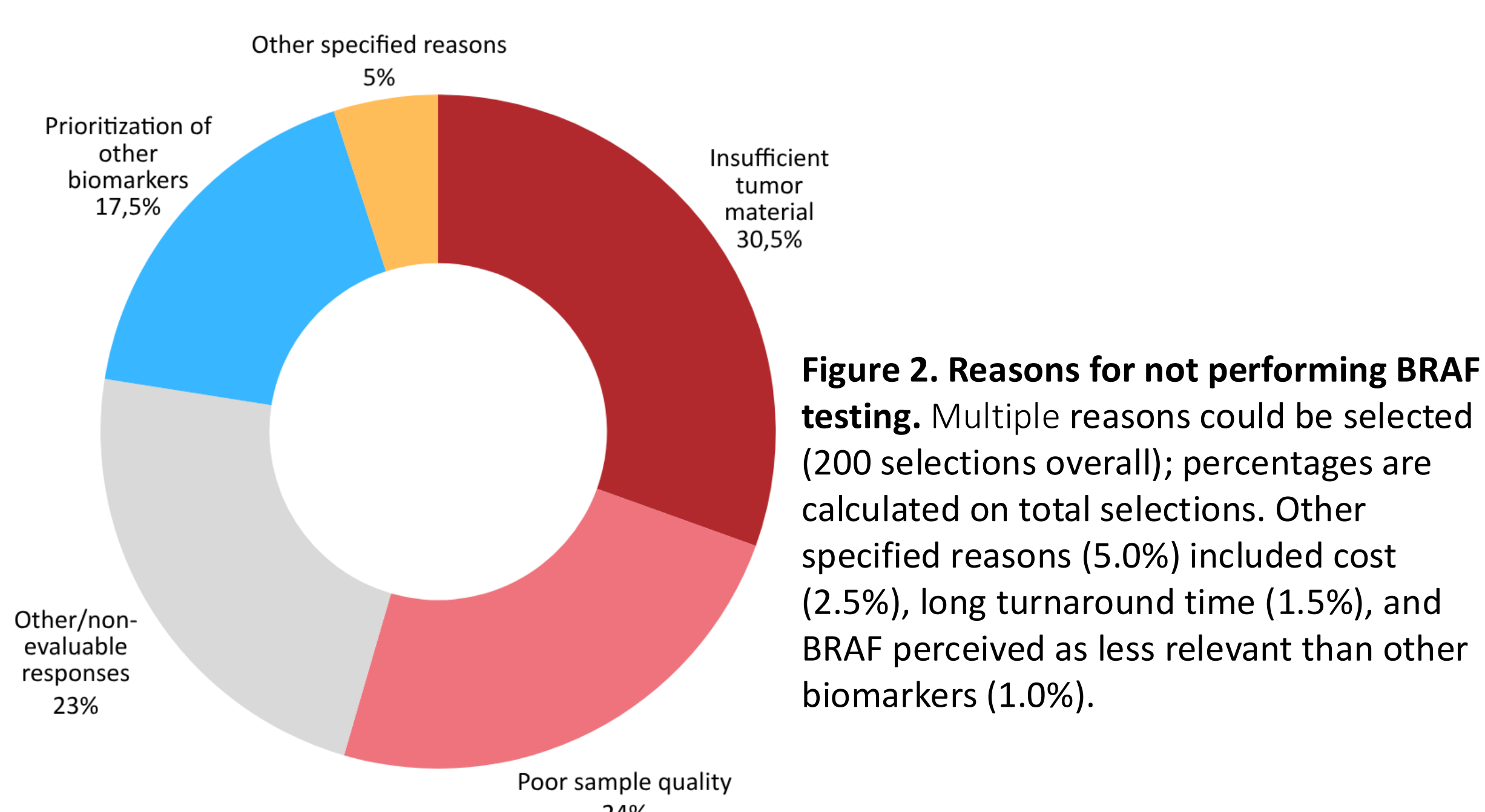


Figure 2. Reasons for not performing BRAF testing. Multiple reasons could be selected (200 selections overall); percentages are calculated on total selections. Other specified reasons (5.0%) included cost (2.5%), long turnaround time (1.5%), and BRAF perceived as less relevant than other biomarkers (1.0%).

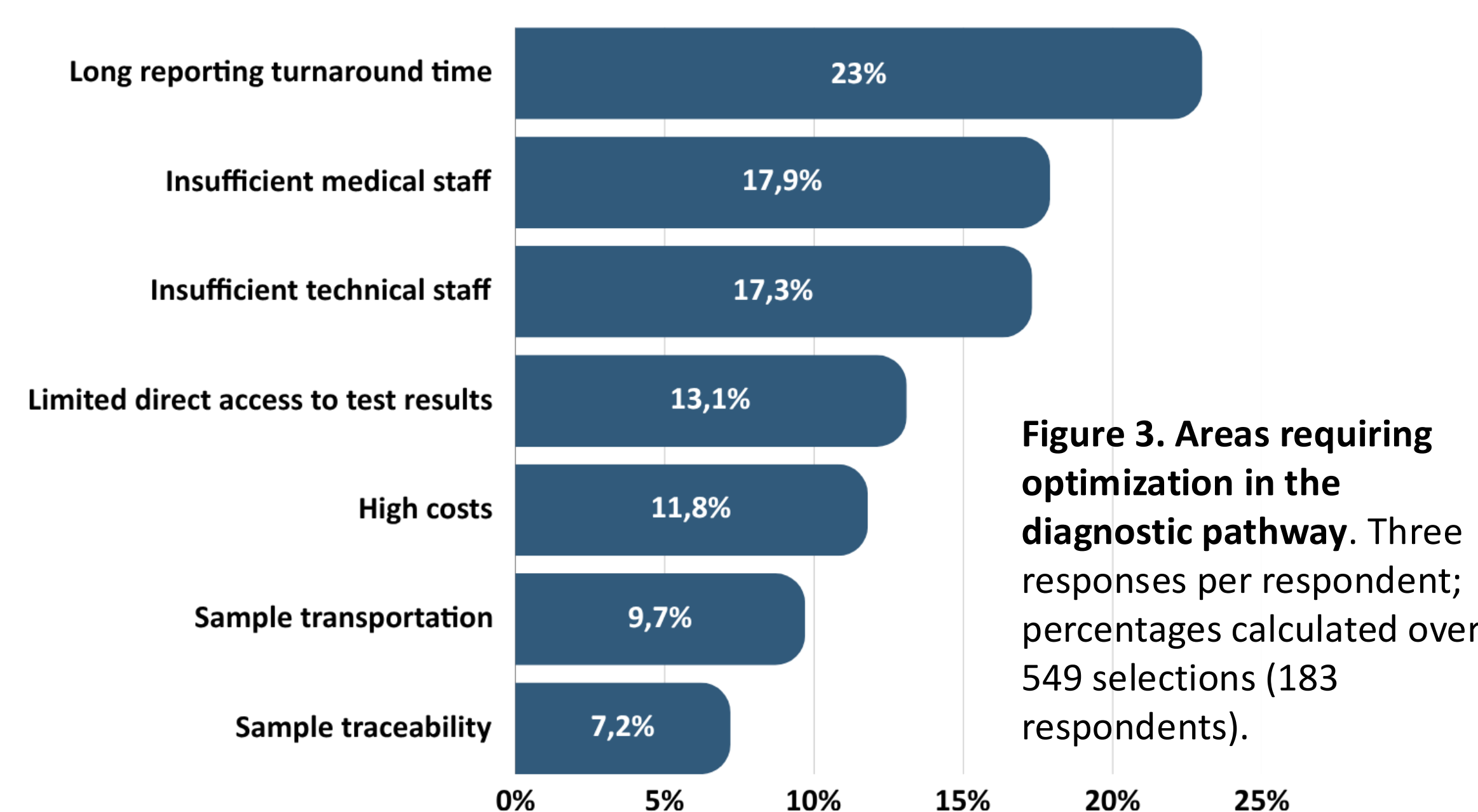


Figure 3. Areas requiring optimization in the diagnostic pathway. Three responses per respondent; percentages calculated over 549 selections (183 respondents).

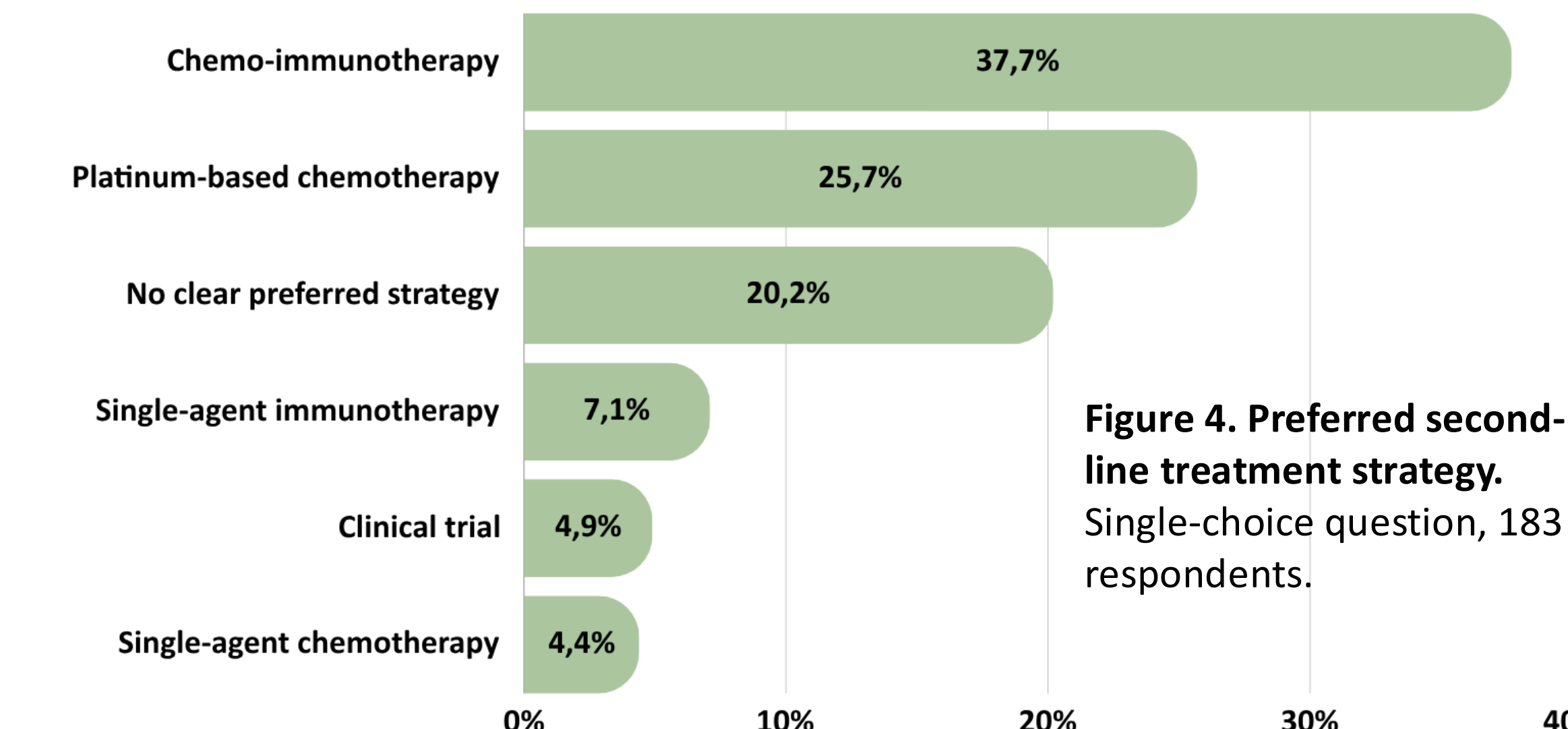


Figure 4. Preferred second-line treatment strategy. Single-choice question, 183 respondents.

DISCUSSION AND CONCLUSION

- This national survey demonstrates high access to BRAF testing in Italy, although pathology-related and organizational barriers persist.
- Management of BRAF-mutated NSCLC remains partially heterogeneous. Most clinicians favor a targeted therapy-first approach, in line with current recommendations.
- A substantial proportion report a greater propensity to use immunotherapy, occasionally considering it even in the first-line setting based on clinicopathological features and PD-L1 expression.
- This variability likely reflects both the distinct clinical profile of BRAF-mutated NSCLC and the absence of robust randomized evidence.
- These findings support the need for further evidence to better inform treatment strategies in this molecular subgroup.

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