

The Breathing Control for Radiation Therapy Consortium (BRIC): Evolution, Initiatives, and Future Directions

Arjan Bel, Amsterdam University Medical Centres, location University of Amsterdam, Amsterdam, The Netherlands (a.bel@amsterdamumc.nl)

Introduction

Breathing management is a key factor in improving the accuracy of radiotherapy and improving image quality in the thorax and upper abdomen. The Breathing Control for Radiation Therapy Consortium (BRIC) originated in 2022/2023 as an informal meeting to facilitate the exchange of ideas on non-invasive mechanical ventilation. Following the 2024 Amsterdam symposium, the group formalised its structure to support a rapidly growing international audience of clinicians and researchers.

Aim

To provide an overview of BRIC and related activities.

Evolution and activities

BRIC provides a global platform for exchanging information and enhancing the visibility of breathing management as a subspecialty. Focus is breathing management through diverse techniques, including Continuous Positive Airway Pressure (CPAP), Non-Invasive Mechanical Ventilation (NIMV), and breath-hold procedures.

The consortium utilises a versatile organisational approach, including quarterly online meetings and informal gatherings at major conferences like ESTRO. As of March 2026, BRIC has grown to 109 active participants across Europe (with most participants), Asia, America, and Australia. Members are mostly working in hospitals (academic or non-academic) but also the industry is represented. BRIC's digital presence has further expanded, with over 200 members now engaging via a dedicated LinkedIn group. With BRIC as its structural backbone, the current symposium is being developed with a view toward becoming a biennial event.

BRIC coordinates efforts to standardise clinical implementation of breathing management techniques. Specialised working groups have been established to address key areas regarding terminology, safety of supplemental oxygen, and clinical implementation issues. The consortium will expand its reach by engaging with international forums in radiotherapy, aligning BRIC working groups with existing platforms for specialized areas like motion management.

BRIC actively promotes collective fundraising initiatives. Suitable projects prioritise collaborative efforts designed to enhance the clinical adoption, quality, and prominence of breathing management equipment. A prime example of such synergy is the 'NextBreathRT' EU COST-Action proposal, with a funding decision anticipated in May 2026.

Conclusion

BRIC has successfully evolved from a small informal group into a substantial international network that bridges the gap between research and clinical application in breathing management. The collaboration, with future support by funded projects, will make breathing management a standard of care in radiotherapy.

Further information

- LinkedIn: www.linkedin.com/groups/13116868
- Website, focus on symposium: www.breathmotioninrt.com
- BRIC membership: forms.gle/QybF7D4W1NXrDqz89