



# EP09.10 : Treatment Interruption for Patients with Thoracic Malignancy Following Accidental COVID-19 Infection

**Takashi Inoue<sup>1</sup>**, Atsuhiro Takahashi<sup>1</sup>, Kouhei Sugamo<sup>1</sup>, Kenta Hasumi<sup>1</sup>, Kenta Nakahashi<sup>1</sup>, Aya Nomura<sup>1</sup>, Osamu Araki<sup>1</sup>, Takahiroya Nakajima<sup>1</sup>, Sumiko Maeda<sup>1</sup>, Emi Ueno<sup>1</sup>, Naomi Ebihara<sup>1</sup>, Fumiya Fukushima<sup>2</sup>, Masayuki Chida<sup>1</sup>

<sup>1</sup>Dokkyo Medical University, <sup>2</sup>Nasu Redcross Hospital **Correspondence:** [t-inoue@dokkyomed.ac.jp](mailto:t-inoue@dokkyomed.ac.jp)



## INTRODUCTION

- COVID-19 infection can lead to severe pneumonia and other complications.
- Thoracic malignancy therapy often targets chest organs, though whether to continue following COVID-19 diagnosis remains unclear.
- Continuation of thoracic malignancy treatment for patients with COVID-19 was evaluated.

## METHODS

- Records of 17 patients undergoing drug therapy for thoracic malignancy with/without radiation between December 2022 and March 2025, and with a hospital-acquired COVID-19 infection were reviewed.
- Since May 2024, the policy is to continue drug and/or radiation therapy after COVID-19 diagnosis.
- Age, sex, therapy regimen, COVID-19 treatment, COVID-19 sequelae, therapy interruption, and survival three months post-infection were analyzed.

## RESULTS

### Results

Average age: 64.5 years (range 37-83)

- Males, n=13; Females, n=4
- Underlying disease

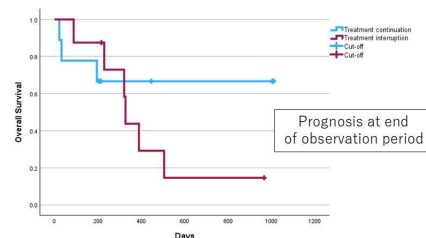
|                           | No. of cases |
|---------------------------|--------------|
| Lung cancer               | 14           |
| Thymic carcinoma          | 1            |
| Thymoma                   | 1            |
| Unknown primary carcinoma | 1            |

- Treatment for COVID-19

|                       | No. of cases |
|-----------------------|--------------|
| Remdesivir            | 13           |
| Symptomatic treatment | 4            |

• No sequelae after COVID-19 infection were detected in any of the patients

• Treatment for thoracic malignancy was interrupted due to COVID-19 infection in 8 cases



2-year overall survival  
Continuation 66.7%, Interruption 14.6%  
p=0.445

**Radiation therapy continued** in all four receiving chemoradiotherapy, even after COVID-19 infection.

- Results: end of observation

|        | No. of cases |
|--------|--------------|
| Alive  | 3            |
| Died   | 1            |
| Cancer | 1            |

- Results: 3 months after COVID-19 infection

|       | No. of cases |
|-------|--------------|
| Alive | 4            |
| Died  | 0            |

Although sample size was small and statistical testing not performed, **radiation therapy during COVID-19 infection appeared to be relatively safe.**

### Results

- Treatment

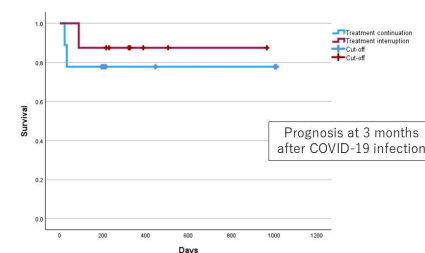
|                          | No. of cases |
|--------------------------|--------------|
| Chemoradiotherapy        | 4            |
| CDDP + VNR               | 3            |
| CBDCA + PTX              | 1            |
| Chemotherapy             | 13           |
| ICI + PltD               | 2            |
| PltD                     | 3            |
| ICI + chemotherapy       | 1            |
| Chemo + VEGF             | 1            |
| ICI monotherapy          | 3            |
| 4-drug combination chemo | 1            |
| Single-agent chemo       | 2            |

- Results: end of observation

|                        | No. of cases |
|------------------------|--------------|
| Alive                  | 8            |
| Died                   | 9            |
| Cancer                 | 8            |
| Interstitial pneumonia | 1            |

- Results: 3 months after COVID-19 infection

|                        | No. of cases |
|------------------------|--------------|
| Alive                  | 14           |
| Died                   | 3            |
| Cancer                 | 2            |
| Interstitial pneumonia | 1            |



p=0.560

## DISCUSSION AND CONCLUSION

- Since 2020, during the COVID-19 pandemic, numerous recommendations and guidelines regarding cancer care have been issued by Japanese oncology-related societies, including the Japanese Cancer Association, Japanese Society of Medical Oncology, Japan Society of Clinical Oncology, Japanese Society for Radiation Oncology, and Japanese Society of Cancer Nursing, as well as international organizations such as ASCO, ESMO, ASTRO, and ESTRO. However, these recommendations have not been substantially updated in recent years, and no clear consensus has yet been established regarding the optimal management of COVID-19 infection in patients undergoing cancer treatment.
- All recommendations note that continuation of treatment in patients with malignant tumors who develop COVID-19 infection should be carefully considered on a case-by-case basis, with no definitive recommendation presented.
- Some reports of thoracic malignancy have noted concerns about COVID-19-related complications associated with treatment, while others have indicated no such issues. No high-level evidence-based recommendations are presently available.
- The present results indicate that thoracic malignancy therapy can be continued in patients with COVID-19 infection, along with careful monitoring.
- Radiation therapy was administered relatively safely in each of the present patients, even during COVID-19 infection.