

Lung Cancer



Quick Read

Lung Cancer Case Reports Summary

Case 1 – Male, 75 years

- **Diagnosis:** Advanced lung cancer with metastases to lungs, pleura, lymph nodes, brain, and bones.
- **Treatment history:** Failed targeted therapy (Gefitinib).
- **Allogeneic CIK Cell Therapy (2013):**
 - **After 1st infusion:** Pain relief, improved mental state, resolution of nausea and vomiting.
 - **After 2nd infusion:** PET/CT showed dramatic regression:
 - Lung tumor size halved with reduced metabolic activity.
 - Most lung, brain, lymph node, and bone metastases disappeared or normalized.
 - **Outcome:** Significant radiographic and symptomatic improvement in a short period.

Case 2 – Female, 65 years

- **Diagnosis:** Advanced lung cancer with metastases to lymph nodes, pleura, liver, adrenal glands, and brain.
- **Treatment decision:** Family declined chemotherapy and radiotherapy.
- **Allogeneic CIK Cell Therapy (2014):**
 - **After 2 months:** Lung mass shrank, lymph nodes reduced, pleural effusion decreased.
 - **After 3 months (PET/CT):** Nearly complete resolution of metastases in pleura, liver, adrenal gland, and brain.
 - **Outcome:** Rapid and profound systemic disease regression using allogeneic CIK cells as a **first-line treatment**.

Key Benefits of Allogeneic Cell Therapy.

- ✓ **Alternative when clinical options are exhausted** – Provided life-saving hope when conventional therapies failed or were declined.
- ✓ **Higher efficacy with allogeneic cells** – Healthy donor-derived immune cells demonstrated strong anti-cancer activity across multiple metastatic sites.
- ✓ **Non-invasive treatment** – Administered via infusion, avoiding further surgical or chemotherapy-related toxicity.

- ✓ **Improved quality of life** – Patients experienced pain relief, restored energy, resolution of debilitating symptoms, and improved daily function.
- ✓ **Durable cancer control** – Achieved rapid regression of both primary and metastatic lesions, preventing further disease spread.

Case Report ONE (1): Significant Radiographic and Symptomatic Response in Advanced Multi-Metastatic Lung Cancer Following CIK Immune Cell Therapy

Patient Information

- **Gender:** Male
- **Age:** 75 years

Diagnosis: Advanced primary lung cancer (right upper lobe central-type) with extensive metastases to both lungs, pleura (with effusion), hilar/mediastinal lymph nodes, brain (multiple lobes), and widespread skeletal system.

Clinical History and Initial Treatment

- **February 20, 2013:** Presented with severe pain and weakness in both lower limbs, accompanied by nausea and vomiting.
- **February 22, 2013:** PET/CT scan revealed:
 1. A large primary right upper lobe central lung cancer (6.3 x 5.3 x 4.9 cm), with multiple metastases throughout both lungs and accompanying pleural effusion.
 2. Metastases in both pulmonary hilar and mediastinal lymph nodes.
 3. Multiple brain metastases (left parietal lobe, frontal lobe; right basal ganglia and cerebellum).
 4. Widespread bone metastases throughout the skeleton.
- **February to April 2013:** Treated with Gefitinib (Iressa) for over a month with no significant clinical or radiographic improvement.

Treatment Approach:

Cell-Based Immunotherapy and Outcomes

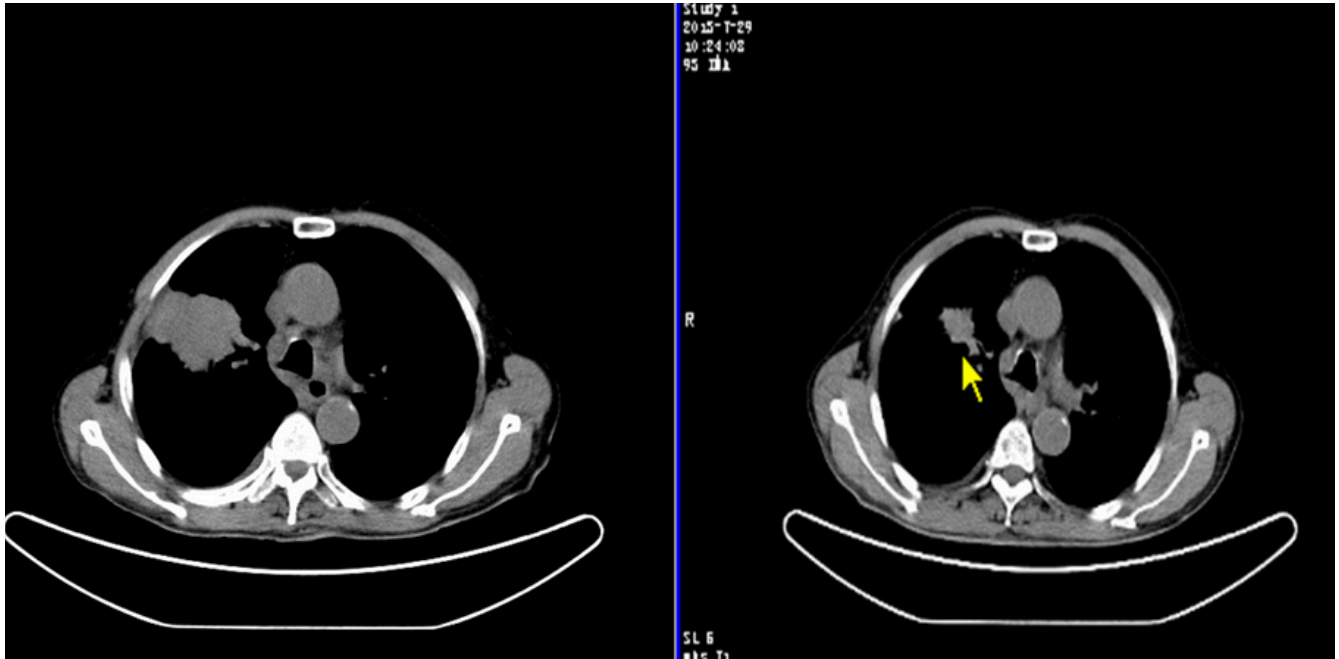
- **First Course (April 18, 2013):** Initiated allogeneic CIK immune cell therapy.
- **Symptomatic Response (Post-First Course):** Reported significant reduction in pain, improved mental state, and complete resolution of nausea and vomiting.
- **Radiographic Response (May 27, 2013 – CT):** Follow-up CT showed:
 - Marked reduction in the size of the primary right upper lung mass.
 - Significant shrinkage of the brain metastases.
- **Second Course (July 18, 2013):** Received a second course of CIK immune cell therapy.
- **Radiographic Response (July 29, 2013 – PET/CT):** Comparative PET/CT demonstrated a profound treatment response:
 1. **Primary Lung Tumor:** Significant size reduction (from 6.3x5.3 cm to 3.0x2.6 cm) and metabolic activity decrease (SUV reduced from 6.5 to 2.1).
 2. **Lung Metastases:** Most lesions had disappeared; remaining small nodules showed normalized metabolism.
 3. **Lymph Node Metastases:** Most lesions decreased in size with reduced metabolic activity.
 4. **Brain Metastases:** Most lesions had disappeared; a residual focus in the right frontal lobe showed normalized metabolism.

5. **Bone Metastases:** Metabolic activity in skeletal lesions was reduced to near-normal levels.

- **Ongoing Observation:** Long-term efficacy remains under continued follow-up.

2013-2-22 (PET)

2013-7-29 (PET)



Conclusion

This elderly patient with advanced, multi-metastatic lung cancer, who failed to respond to initial targeted therapy (Gefitinib), achieved a rapid, significant, and comprehensive radiographic and symptomatic response following two courses of biotherapy. The treatment was associated with dramatic regression of the primary tumor and metastases across all sites (lungs, lymph nodes, brain, and bones), along with complete resolution of debilitating symptoms. This case suggests that immune cell-based biotherapy may represent a highly effective treatment strategy for controlling advanced, treatment-refractory solid tumors with extensive metastatic burden.

Case Report TWO (2): Significant Radiographic Regression of Advanced Multi-Metastatic Lung Cancer Following First-Line Allogeneic CIK Cell Therapy

Patient Information

- Gender: Female
- Age: 65 years

Diagnosis: Advanced primary lung cancer with extensive metastases to the pulmonary hilar/mediastinal lymph nodes, liver, adrenal glands, pleura, and brain (left frontal lobe). Accompanied by moderate pleural effusion and pulmonary atelectasis.

Clinical History and Initial Presentation

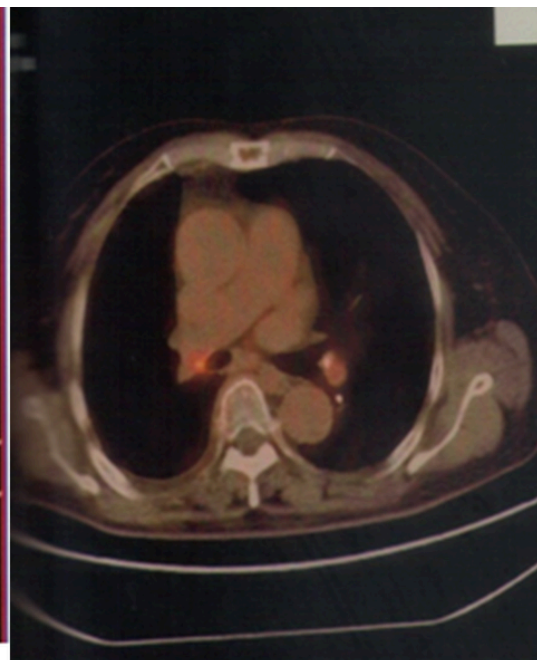
- April 10, 2014: Presented with persistent and worsening cough, activity-induced shortness of breath, chest tightness, and dyspnoea. Symptoms were severe enough to cause difficulty climbing stairs.
- May 17, 2014: PET/CT scan confirmed the extensive disease:
 1. Primary lung cancer with widespread systemic metastases (hilar, mediastinal, liver, adrenal).
 2. Moderate pleural effusion with associated lung collapse (atelectasis).
 3. A nodule in the left frontal lobe of the brain, consistent with metastasis.
- Treatment Decision: **The patient's family declined conventional radiotherapy and chemotherapy.**

Treatment Course and Outcomes

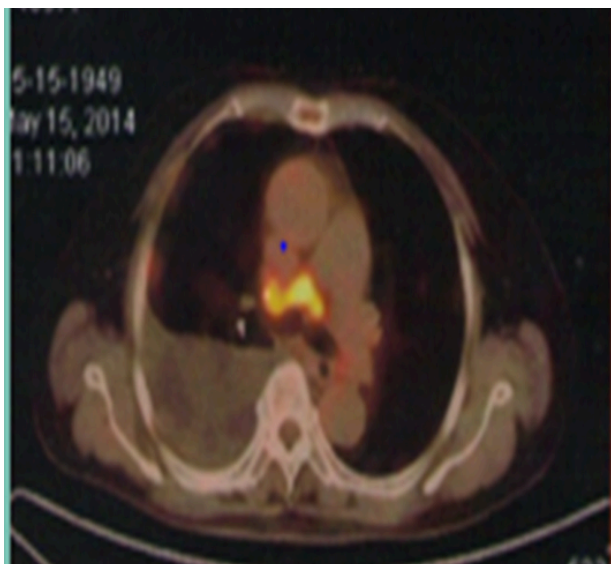
- First-Line Intervention (June 3, 2014): Initiated treatment with allogeneic CIK (Cytokine-Induced Killer) cell therapy from healthy donors.
- Initial Response (August 8, 2014 – MRI): Follow-up MRI after two months showed:
 - Significant shrinkage of the para-pulmonary mass.
 - Reduction in size of mediastinal lymph nodes.
 - Marked decrease in right-sided pleural effusion.
- Combination Therapy: Following initial response, treatment was complemented with thoracic hyperthermic perfusion, Gefitinib (Iressa), and traditional Chinese medicine.
- Profound Radiographic Response (September 10, 2014 – PET/CT): A comprehensive PET/CT scan demonstrated remarkable improvement:
 1. Primary Tumor: The central right lung mass had significantly decreased in size.
 2. Lymph Nodes: Hilar and mediastinal metastatic foci had markedly shrunk, with some nodes returning to normal metabolic activity.
 3. Pleural & Liver Metastases: Multiple metastases on the pleura and within the liver had essentially disappeared.
 4. Adrenal Metastasis: The adrenal gland lesion had essentially disappeared.
 5. Brain Metastasis: The left frontal lobe metastatic nodule had essentially disappeared.
- Ongoing Treatment (September 16, 2014): Received a third course of allogeneic CIK cell therapy. Long-term outcomes remain under observation.



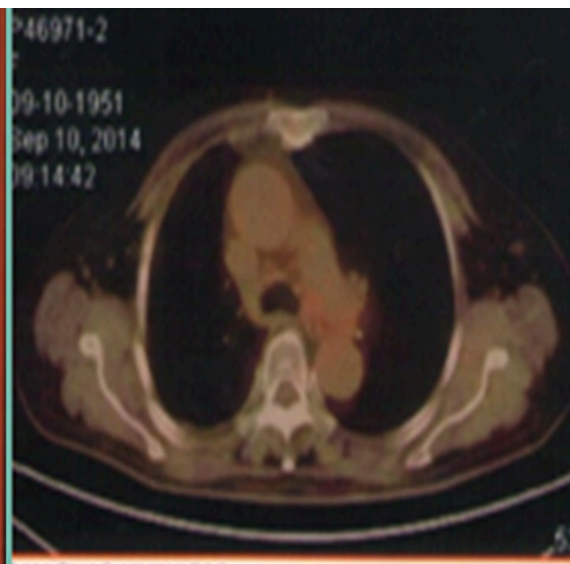
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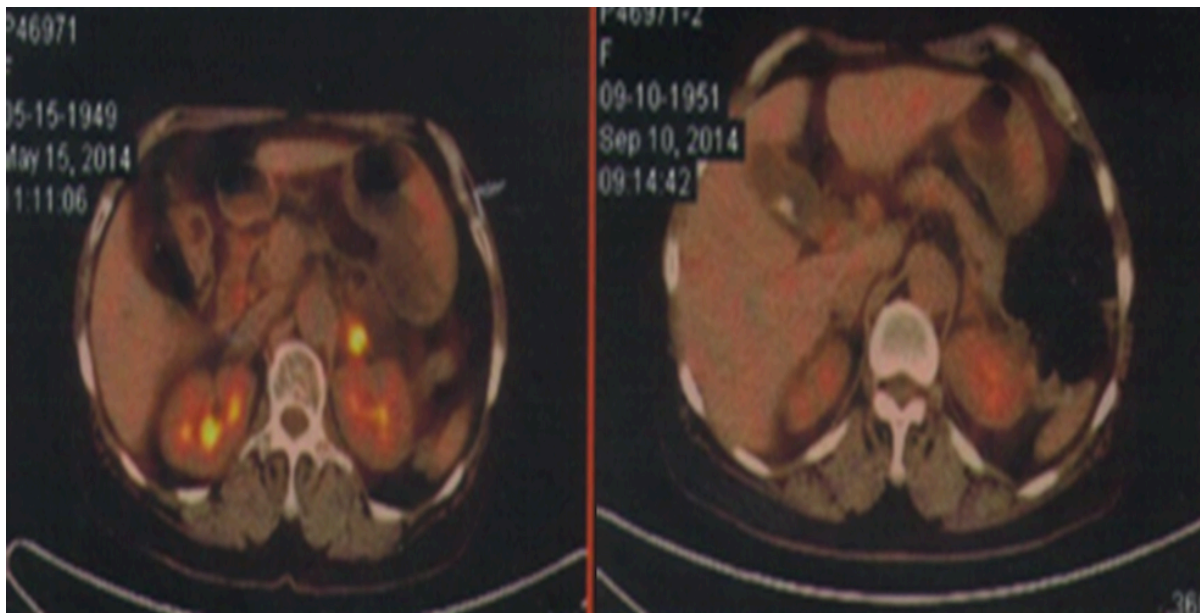
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Conclusion

This patient with advanced, multi-metastatic lung cancer, for whom first-line conventional therapy was declined, achieved a rapid and profound radiographic regression of both primary and metastatic lesions following first-line treatment with allogeneic CIK cell therapy.

The dramatic response, observed across all metastatic sites including the brain, liver, and adrenals, was further enhanced by a subsequent combination of targeted therapy and local perfusion. This case suggests that allogeneic CIK immunotherapy may serve as a potent primary intervention for advanced metastatic lung cancer, capable of inducing significant disease regression and serving as a core component of a combined modality approach.