

Brain Cancer



Quick Read

Case Report 1 – Metastatic Intracranial Hemangiopericytoma (Male, 22 yrs)

- History (2010–2013): Multiple surgeries, radiotherapy, Gamma Knife, and chemotherapy failed. Disease spread to bones and caused severe hip pain.
- CIK Cell Therapy (2013–2014): Four courses of allogeneic Cytokine-Induced Killer (CIK) cell immunotherapy.
- Outcomes:
 - Rapid pain relief after first course.
 - MRI (2014): Near-complete disappearance of metastases.
 - Long-term: Graduated, employed, married, and became a father.
- Conclusion: Achieved complete remission and functional recovery despite aggressive, treatment-resistant cancer.

Case Report 2 – Recurrent Medulloblastoma (Male, 18 yrs)

- History (1997–2007): Surgery in Singapore; recurrence 10 years later. Chemotherapy failed; doctors declared no further options.
- CIK Cell Therapy (2007–2014): Four courses of allogeneic CIK immune cell therapy.
- Outcomes:
 - Significant clinical and radiological improvement.
 - Follow-ups (2009–2014): No tumor recurrence or metastasis.
 - 8 years disease-free survival, good health, employed, normal life.
- Conclusion: Long-term complete remission achieved with CIK therapy after standard treatments failed.

Key Benefits of Allogeneic CIK Immune Cell Therapy

- ✓ **Alternative when clinical options are exhausted** – Offered hope where surgery, radiation, and chemotherapy failed.
- ✓ **Higher efficacy with allogeneic cells** – Healthy donor-derived immune cells are stronger, more active, and more effective than patient's own compromised cells.
- ✓ **Non-invasive treatment** – Simple infusion, no further surgical trauma.
- ✓ **Improved quality of life** – Pain relief, restored function, and ability to return to normal activities.

✅ **Durable cancer control** – Prolonged remission, prevented recurrence, and stopped further spread.

Case Report ONE (1): Complete Radiographic Remission and Functional Recovery in Metastatic Intracranial Hemangiopericytoma with CIK Cell Immunotherapy

Patient Information

- **Gender:** Male
- **Age:** 22 years (at time of initial treatment in 2013)

Diagnosis: Metastatic intracranial hemangiopericytoma (now classified as solitary fibrous tumor/hemangiopericytoma spectrum).

Clinical History & Prior Treatments (2010–2013)

- **2010:** Underwent initial resection of a right occipital hemangiopericytoma, followed by 20 sessions of radiotherapy.
- **2012:** Experienced recurrence at the right jugular foramen. Underwent a second resection, followed by Gamma Knife radiosurgery.
- **May 2013:** Diagnosed with a metastasis to the C3 vertebral body. Underwent a *third* surgery for resection and stabilization with titanium mesh implantation.
- **July 2013:**
 - CT scan revealed new metastases to the right femur and left ischium/acetabulum.
 - Underwent two cycles of chemotherapy, but treatment was halted due to severe side effects.
 - **July 16, 2013 (Baseline):** A comprehensive PET/CT scan confirmed extensive metastatic disease involving the clivus, right second anterior rib, T5, T10, L4 vertebrae, sacrum, right ilium, proximal right femur, and left ischium.
 - **Status:** The patient was in significant hip joint pain but was otherwise in fair general condition.

Treatment Approach:

Cell-Based Immunotherapy and Outcomes

- **First allogeneic CIK Course (August 2013):** Initiated CIK (Cytokine-Induced Killer) cell therapy.
 - **Response:** General condition improved markedly; hip pain resolved completely.
- **September 22, 2013 (MRI):** Follow-up imaging showed reduction in the size of some metastatic masses compared to the July 5 scan.
- **Second allogeneic CIK Course (October 4, 2013):** Received a second course of therapy.
 - **Functional Outcome:** felt well enough to return to normal schooling.
- **Third allogeneic CIK Course (January 20, 2014):** Received a third course of therapy.
- **April 12, 2014 (MRI):** Follow-up MRI showed **near-complete disappearance of all metastatic lesions.**
- **Fourth allogeneic CIK Course (April 26, 2014):** Received a fourth consolidation course of therapy.

Long-Term Functional Outcomes & Quality of Life

- **2014:** Graduated from university and began employment at a company in Beijing.
- **2015:** Got married.
- **2016:** Fatherhood – welcomed a child.

Conclusion

This young patient with aggressive, multiply recurrent, and widely metastatic intracranial hemangiopericytoma, which progressed despite multiple surgeries, radiotherapy modalities, and failed chemotherapy, achieved a complete radiographic remission and full functional recovery following treatment with CIK cell immunotherapy.

The therapy resulted in the resolution of debilitating pain, the eradication of metastatic disease across multiple skeletal sites, and enabled the patient to achieve all major personal and professional life milestones (graduation, employment, marriage, fatherhood). This case provides compelling evidence for the potent efficacy of CIK cell therapy in achieving long-term disease control and functional cure in advanced, treatment-resistant metastatic sarcoma.



Case Report TWO (2): Long-Term Remission of Recurrent Medulloblastoma Following CIK immune Cell Therapy

Patient Information

- **Gender:** Male
- **Age:** 18 years (at time of recurrence in 2007)
- **Background:** Indonesian Chinese

Diagnosis: Recurrent medulloblastoma (primitive neuroectodermal tumor, PNET).

Clinical History

- **1997:** Underwent surgical resection for medulloblastoma at Mount Elizabeth Hospital, Singapore.
- **2007:** Experienced tumor recurrence. Received 6 cycles of chemotherapy, which was ineffective; post-treatment imaging showed slight tumor growth.
- **November 2007:** Travelled to Guangzhou China for consultation. Five major hospitals and their specialists concluded no further conventional treatment options were available.

CIK Cell Therapy and Outcomes

- **Treatment Initiation (Late 2007):** Commenced first course of allogeneic CIK immune cell therapy.
- **Therapeutic Response:** Demonstrated a significant clinical and radiological response to the biological therapy.
- **From 2008 to 2014:** Allogeneic CIK immune cell therapy for 4 courses.
- **Long-Term Imaging Follow-Up (3, 4, and 5 Years Post-Treatment):** Annual CT scans showed:
 1. No evidence of intracranial tumor recurrence or metastasis.
 2. Normal ventricular size and midline structure without shift.
 3. No abnormalities in the orbits or mastoid processes.
 4. Stable imaging findings compared to the 2009 MRI baseline.
- **Current Status (8+ Years Post-Treatment):** The patient remains in good health with no evidence of disease recurrence, has successfully entered the workforce, and maintains a normal quality of life.

Conclusion

This patient with recurrent medulloblastoma, who had **exhausted all standard treatment options** including surgery and chemotherapy, achieved long-term complete remission exceeding 8 years following treatment with biological immunotherapy.

The sustained radiographic stability and excellent functional outcome highlight the potential of immune cell-based strategies to induce durable disease control and provide a curative option for patients with recurrent medulloblastoma who have no other therapeutic alternatives. This case underscores the importance of exploring innovative immunotherapies for refractory paediatric and adolescent brain tumors.



Oct 2009



Oct 2014