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Sharad Mahile

May 5, 2009

To Whom It May Concern:

**Medical Report on:**

**Name :** CHARMAINE LIM FAN XI  
**NRIC :** TG0520021

Charmaine is a vibrant and a very strong young girl who was recently diagnosed in February 2009 with a cancer called Neuroblastoma, stage 4, high risk. It is high risk because the disease has spread to her bone marrow and her bones. Neuroblastoma is a form of cancer that occurs in infants and young children. (The term **neuro** indicates "nerves," while **blastoma** refers to a cancer that affects immature or developing cells).

She initially presented with abdominal swelling and pain for two months in February of this year. Further investigation including blood tests, scans, and a biopsy revealed the diagnosis. She has undergone two cycles of chemotherapy since her diagnosis. Her most recent hospitalization was for fever was on 6/4/09. She is waiting for her third cycle of chemotherapy admission which is expected to be 8/5/09. Charmaine is scheduled for a repeat bone marrow aspiration and trephine biopsy under sedation to access her bone marrow disease status on 6/5/09.

Treatment for her Neuroblastoma involves dose intensive, strong chemotherapy (total of five cycles given every 3-4 weeks) followed by surgery to remove the tumor, followed by very high intensity chemotherapy and a blood-forming stem cell transplantation or bone marrow transplant [Reference: Kushner BH et al. *J Clin Oncol* 2004;22:4888]. She will also need radiation therapy to the primary tumor and metastatic sites in her body. Upon completion, when the disease is repoding well, she will continue on oral maintenance chemotherapy for approximately 6 months. This extensive treatment will span over approximately 9-12 months. Singapore experience reveals that this type of treatment will provide a survival chance of approximately 20%. The approximate cost for the initial treatment of neuroblastoma, stage 4 high risk at National University Hospital is as attached from Ms. Teng Mee Cheng, executive, NUH in a separate report.

As reported in the reference attached by Kushner BH et al from Memorial Sloan-Kettering Cancer Center (MSKCC), New York, the above treatment plus the addition of monoclonal antibodies (i.e. immunotherapy) called 3F8, will provide a higher survival chance with report up to 40-50%. However, the 3 F8s are not available in Singapore. MSKCC, is considered the premier center in the world for children with Neuroblastoma, high risk and otherwise.. The response from the International Patient Center at MSKCC revealed that the instructions for foreign patients stated " On-Site Consultation and Treatment: After consulting with a physician here, you may decide to stay for treatment, initial payment of US\$350,000 with additional payments needed

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prior to continuing on with treatments). "[E-Mail: [intnlprg@MSKCC.ORG](mailto:intnlprg@MSKCC.ORG); <http://www.mskcc.org/pediatrics> <<http://www.mskcc.org/pediatrics>]

During the treatment, she will experience some side effects such as fever, high risk from infection for which she will have to be admitted and observed in the hospital, nausea, vomiting, and hair loss. She will also need to be closely monitored and followed up in the outpatient clinic. Charmaine will also require constant care and close monitoring at home as she is susceptible to infection. It is suggested that her main caregiver, her mother, continue to do so.

She will need re-evaluation scans periodically for follow-up of the response of her cancer. Various imaging scans must be used for this aggressive cancer as no one good scan is sensitive and specific enough [Reference: Kushner BH. *JC Nucl Med* 2004; 45:1172]. Imaging studies used for neuroblastoma include MRI scan, CT scans, PET-CT scan, MIBG scan, and bone scan. After completion of treatment, Charmaine will need close follow-up, initially every month for first year, and then every 2- 3 months from second to fifth years. She will also need surveillance scans as described every 3- 6 months depending on her complaints and clinical status.

Thank you for your understanding and support for Charmaine, her mother and her family during these difficult times. If you have any further questions, please do not hesitate to contact me.

Thank you,

Yours Sincerely,



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