



# Unanticipated Immune Complications from Tumor Immunotherapy

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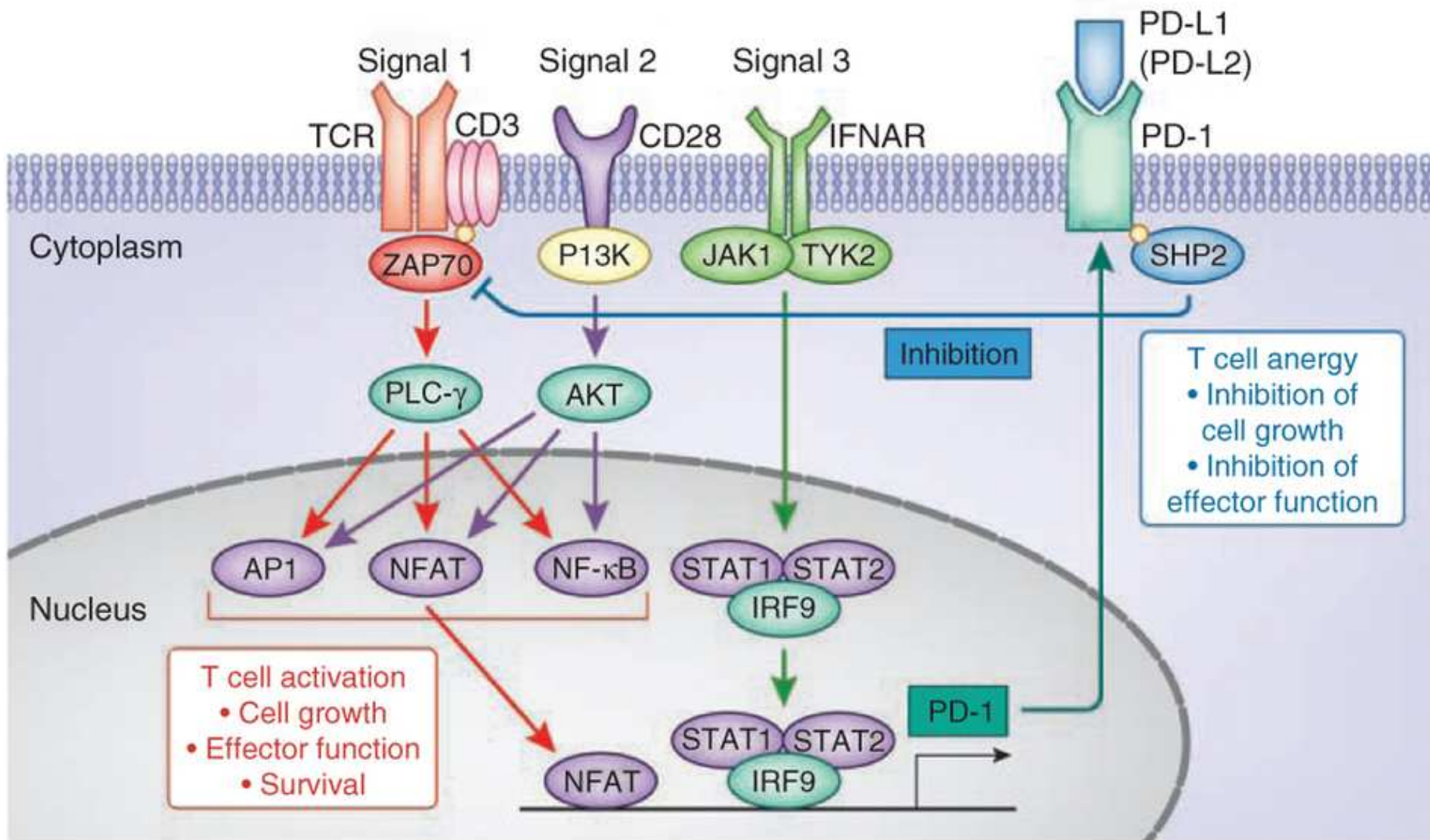
University of Iowa Hospitals and Clinics

\* Inside the Thrihnukagigur Volcano, Iceland

# Abbreviated History of Present Illness

- 75-year old male with myasthenia gravis and metastatic melanoma presents with a two week history of worsening muscle weakness, leading to diplopia and shortness of breath.
  - Myasthenia gravis was diagnosed five years ago and had been well-controlled on Mycophenolate Mofetil 750mg daily
  - Metastatic melanoma was diagnosed three months ago
  - He was started on Pembrolizumab and received the second dose three weeks ago
- Physical Examination reveals:
  - Mild tachypnea and tachycardia
  - Rales bilaterally
  - Marked bilateral ptosis and left-sided exotropia





# Hospital Course

- He was diagnosed as having an acute exacerbation of myasthenia gravis
  - Paraneoplastic antibody panel, anti-TPO, anti-TG, and anti-GAD antibodies were ordered – and ultimately returned negative
- Prior to immunology consultation, he underwent:
  - Seven rounds of plasmapheresis
  - 1 gram methylprednisolone on two occasions
  - Mycophenolate mofetil 500mg twice daily
- Initial temporizing measures included:
  - Intravenous immunoglobulin (2g/kg) once
  - 1g methylprednisolone
- Rituximab 375mg weekly (Four infusions total) was initiated to reduce the burden of acetylcholine receptor antibodies

# Between a rock and a hard place

- What does the lack of response to plasmapheresis, steroids, rituximab, and mycophenolate mofetil indicate about the underlying disease process?
- What other methods can we employ to counteract the effects of pembrolizumab?



\* Eyjafjallajökull, Iceland

# Enter A

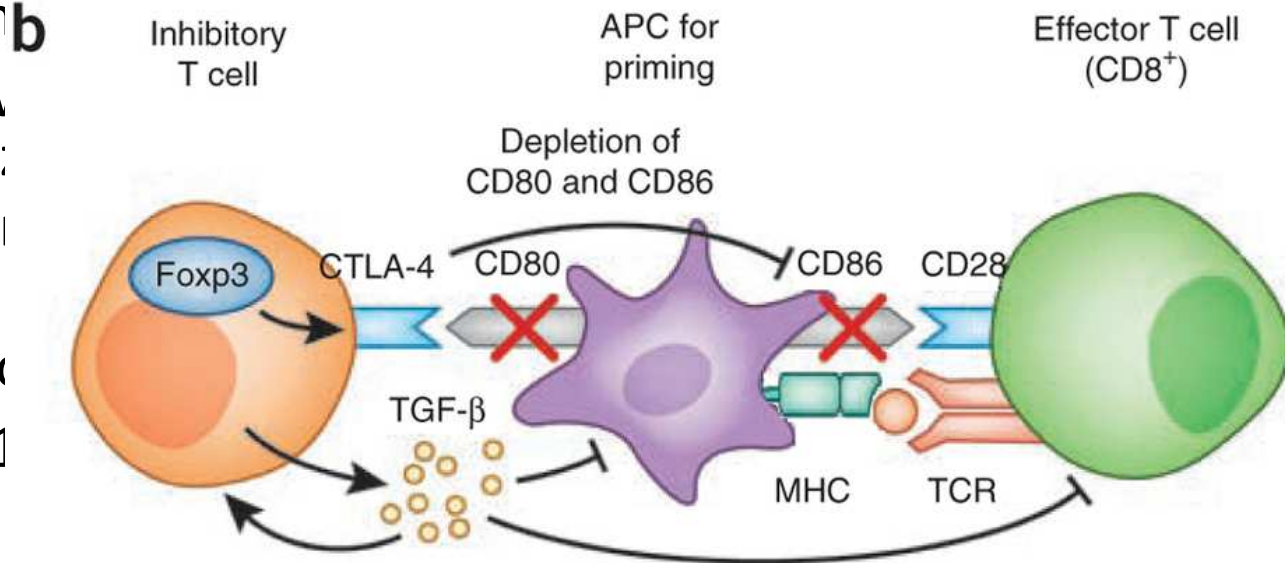
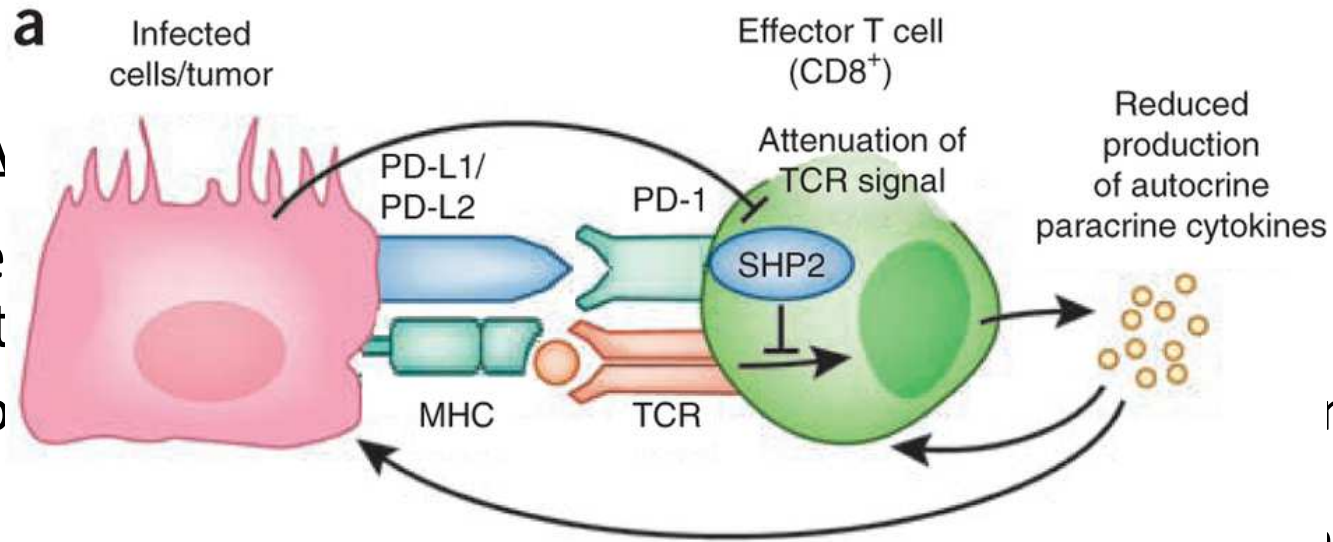
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