# My Story of Hope & Encouragement Matt Reidy

### Who Is This Guy?

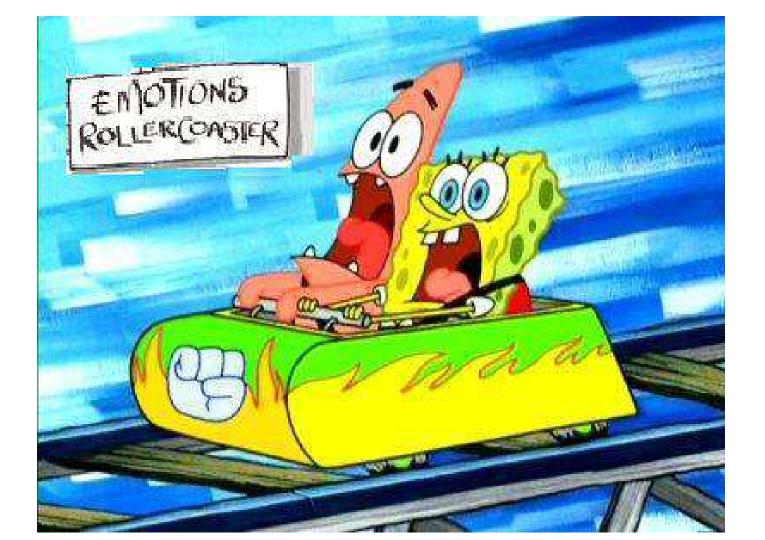
- Matt Reidy
- 50 years young
- Grew up in Elmira, NY
- Bachelor of Science from RIT in Management Information Systems
- Married to Amy
- Four children; Alex, Emma, Aiden, and Dylan (ages 21, 18, 10, 8)
- Have lived in Richmond, VA for the past 20 years
- IT Professional for 29 years
- Retired

### 2013

### Life is Good, Normal







# Mild itching and fatigue

## leads to testing and diagnosis.

- Alk Phos: 970 (8x)
- ALT: 749 (12x)
- AST: 404 (8x)
- Bilirubin: 16 (12x)
- CA 19-9: 234 (7x)



### One Way Ticket to Mayo Clinic, Rochester, MN



# Post-Resection Diagnosis: Perihilar, Stage II, T2a-N0-M0

Pathology Report: Invasive, moderately to poorly differentiated cholangiocarcinoma is identified, forming a 2.5 x 1.4 x 0.5 cm mass involving the common hepatic and the left hepatic bile ducts. The tumor invades into periductal soft tissue. Perineural invasion is identified. The surgical margins including the hepatic parenchyma and the bile duct are negative for tumor. Small vessel invasion is identified but no major vessel invasion is seen. The gallbladder is negative for tumor. Multiple (9) lymph nodes are negative.

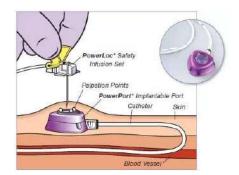


# Recurrence at One Year Post-Resection Check-Up

An MRI of the abdomen demonstrated a <u>cystic lesion measuring 1.5 cm on the</u> <u>pancreatic neck</u>. Additionally, he had <u>elevation of his CA 19-9 to 360</u> units/mL. He had an endoscopic ultrasound for further characterization of the mass seen on the MRI. The mass appeared hypoechoic with irregular margins measuring 19 mm x 19 mm on EUS. It appeared to be abutting the pancreas and a loop of bowel and was suggestive of an omental deposit. <u>Cytology results were consistent with</u> <u>metastatic adenocarcinoma</u> with features similar to that of his known previous cholangiocarcinoma.

# Chemotherapy at Medical College of Virginia

Gemcitabine & Cisplatin Standard Therapy A total of only 2 rounds; 6 infusions









# Surgery for Recurrence

**Operative Report:** Palpation of the Roux-Y limb along the mesenteric border revealed <u>a 1.5- to 2-cm nodule</u> involving the mesentery. The nodule was approximately 4 to 5 cm proximal to the transected end of the Roux-Y limb. <u>Resection of this nodule required resection and reconstruction of the biliary anastomosis</u>. The nodule appeared to be fixed posteriorly to the portal vein extending to the liver. Given the apposition of this tumor nodule to the portal vein and the probably the biliary anastomosis would require reconstruction, <u>resection</u>



was not undertaken.



# **Radiation at Mayo Clinic**

Completed Intensity Modulated Radiation Therapy (IMRT) consisting of 56 Gy in 28 fractions (5 days a week for 6 weeks), with oral capecitabine.



### I made it to 49 !!

### Pembrolizumab Off-Label with Andrew Poklepovic at Medical College of Virginia

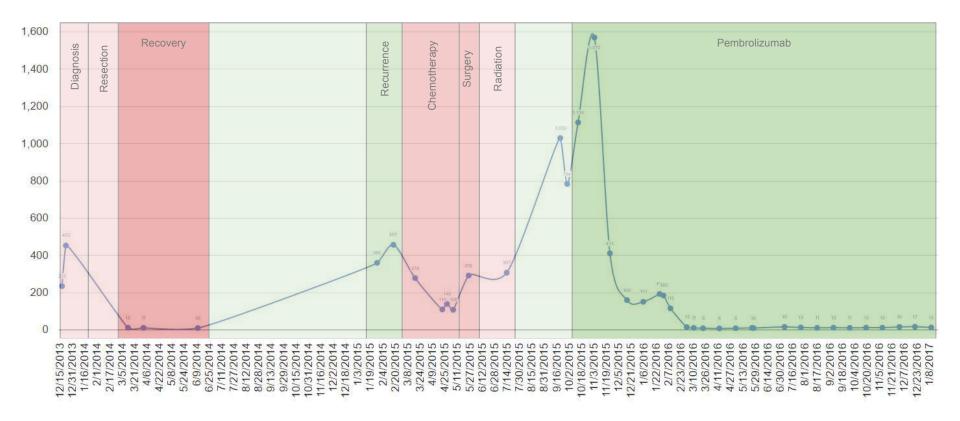




# I made it to 50 !!!

Adda

### My Treatment & CA 19-9 History

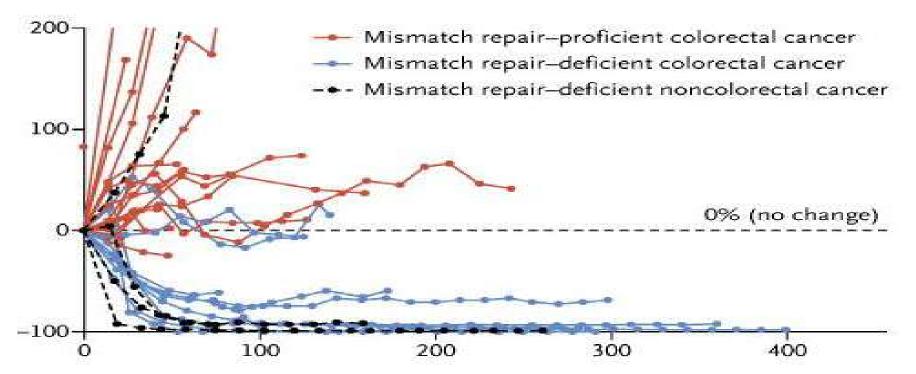


### My Genomic Alterations

FoundatioOne Report, 2/24/2014:

Genomic Alterations Detected	FDA Approved Therapies (in patient's tumor type)	FDA Approved Therapies (in another tumor type)	Potential Clinical Trials
FBXW7 R278*	None	Everolimus Temsirolimus	Yes, see clinical trials section
KRAS G12D	None	Trametinib	Yes, see clinical trials section
<i>PIK3CA</i> N345K	None	Everolimus Temsirolimus	Yes, see clinical trials section
<b>TP53</b> R175H	None	None	Yes, see clinical trials section
<i>FAM123B</i> F173fs*36	None	None	None
MAP3K1 L920fs*10	None	None	None
<b>MLH1</b> K678fs*7	None	None	None

PD-1 Blockade in Tumors with Mismatch-Repair Deficiency from NEJM 6/25/15 Biochemical Response:



This study showed that mismatch-repair status predicted clinical benefit of immune checkpoint blockade with pembrolizumab. (PMID: 26028255 PMCID: PMC4481136 DOI: 10.1056/NEJMoa1500596)

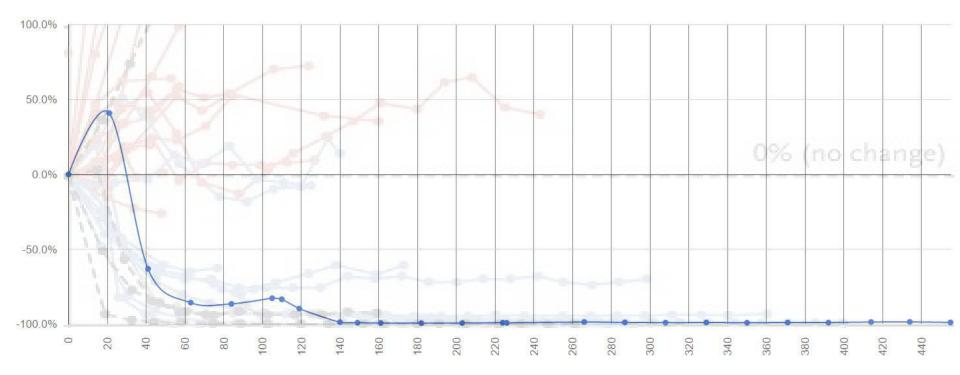
### MLH1 - Why Pembrolizumab Works for Me?

The *MLH1* gene provides instructions for making a protein that plays an essential role in DNA repair. This protein helps fix mistakes that are made when DNA is copied (DNA replication) in preparation for cell division.

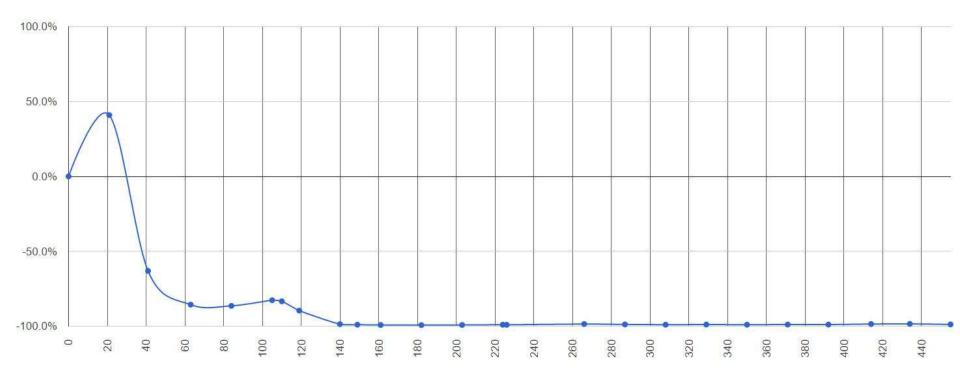
The *MLH1* gene is a member of a set of genes known as the mismatch repair (MMR) genes.

Defects in MMR commonly lead to microsatellite instability (MSI) which may lead to a greater number of somatic mutations which may help the immune system to identify and attack cancer cells. Using Pembrolizumab to "take the brakes" off the immune system in these cases, can work.

#### My Biological Response to Pembrolizumab % Change in CA 19-9:



#### My Biological Response to Pembrolizumab % Change in CA 19-9:



### I am...

### "The luckiest unlucky guy I know."