<table>
<thead>
<tr>
<th>NAME</th>
<th>TITLE</th>
<th>PROGRAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Christine Zhang</td>
<td>Large Patient Photo and Name Check at Time of Order Signing Significantly Reduces Placement of Orders on Wrong Patients</td>
<td>GBMC</td>
</tr>
<tr>
<td>RESEARCH 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dr. Samuel Rosner</td>
<td>Early Shift in Immune Cell Subsets to Predict Response to Immune Checkpoint Blockade in Non-Small Cell Lung Cancer (NSCLC)</td>
<td>Johns Hopkins/Bayview</td>
</tr>
<tr>
<td>RESEARCH 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dr. Harita Shah</td>
<td>Solo Se Vive Una Vez (You Only Live Once): A Campaign to Improve HIV Testing Among Immigrant Latinx in Baltimore</td>
<td>Johns Hopkins/Broadway</td>
</tr>
<tr>
<td>RESEARCH 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dr. Ahmad Al-Abdouh</td>
<td>Aspirin Efficacy in Primary Prevention: A Meta-Analysis of Randomized Controlled Trials</td>
<td>St. Agnes</td>
</tr>
<tr>
<td>RESEARCH 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dr. Dina Ioffe</td>
<td>Oligoclonal Banding and Survival in Patients Receiving TCR Infusions Allowing ASCT</td>
<td>UMMS/VA</td>
</tr>
<tr>
<td>RESEARCH 5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Please check one. First author is:
( X ) RESIDENT
Please check only one. Abstract is submitted to:
( ) Poster
( ) Oral
( X ) Either
General Classification:
( ) Clinical Vignette
( X ) Research Vignette
( ) Basic Science
( ) Evidence based medicine review
( X ) Quality/Safety
( ) Clinical Research

Indicate your participation in research process (4 sentences or less):

Concept development
Data collection
Data processing
Manuscript development

First Author Information:

Name: Christine Zhang, MD
Institution: GBMC
Daytime Phone: 443-849-3760
Co-Authors/Associates: Jennifer Freimund, MD

Program Director's Name: Paul Foster, MD

Large Patient Photo and Name Check at Time of Order Signing Significantly Reduces Placement of Orders on Wrong Patients.

Background:
Electronic medical record (EMR) systems, competing for physician support, have developed strategies to minimize typing and mouse clicks with the unintentional impact of increased orders on wrong patients. In previous work, we validated a statistical tool that estimates computerized physician order entry (CPOE) identification error (COIDE) using order repetition rates. The index that resulted from the tool demonstrated a minimum of 0.5% order misplacement. The errors directly correlated with increasing numbers of patient orders per hour. The error rate did not improve with resident seniority. Many of these errors appeared innocuous to clinical staff; yet likely represent significant latent risk for inappropriate treatment, testing, and costs. In this follow up, we piloted a novel technique where all resident orders triggered a large pop-up demographic with the patient's name, age, date of birth and large picture over a 1-month period. Our goal was to explore the impact on COIDE and search for any unexpected negative effects on work flow or safety.

Method:
Our EMR team developed an Epic off-the-shelf best practice advisory (BPA). As an initial test of concept and expedited review by our IRB, we implemented the BPA with all residents. Interns who placed CPOE orders both before and after the pop-up intervention were surveyed about effectiveness and limitations. We also used the COIDE index to compare the interns’ error patterns during the first three months of internship in comparison with the implementation period.

Results: From the anonymous resident survey, 63% (12 out of 19 residents) said the pop-up “helped them prevent orders from being placed on the wrong patient”. Thirty-seven% stated they found themselves “placing orders on the wrong patient at least once per week”. Seventy-four% reported at “least one COIDE during the month”. Of concern, 42% reported clicking through the pop-up without reading the demographic information as “frequently or always”. Additionally, 32% reported “unanticipated consequences”. Our study had technical issues ensuring adequate construction of the photograph in that it sometimes appeared cropped or out of frame. Further supporting the impact, there was a 37% decrease in COIDE index pre- and post-intervention, (9.2 vs 5.8, paired t-test, two tailed p-value < 0.05)

Conclusions:
The resident's survey (including both interns and senior residents) and COIDE index both demonstrated a significant decrease in patient identification errors. Using a demographic, large, photographic pop-up alert may substantially reduce a previously underappreciated cause of error associated with EMRs. The index reduction implies a likely real prevalence of error of 3-5%. The index may be valuable in evaluating compliance and comparing alternate strategies. We need to work further to reduce the click-through rate. Based on these preliminary findings, we continue to roll out the project to other physicians/hospitalists and anticipate particular impact with Emergency Room doctors and nocturnal hospitalists where high volume orders and distraction are present. Application of a large photographic pop-up should be straightforward in alternate institutions and electronic systems.
AMERICAN COLLEGE OF PHYSICIANS

MARYLAND REGION
ANNUAL ASSOCIATES MEETING
MAY 9, 2019

Please check one. First author is:
(X) RESIDENT
Please check only one. Abstract is submitted to:
( ) Poster
( ) Oral
(x) Either

General Classification:
( ) Clinical Vignette
(x) Research Competition
( ) Basic Science
( ) Evidence based medicine review
( ) Quality/Safety
(x) Clinical Research

Indicate your participation in research process (4 sentences or less): Developed clinical database and performed statistical analysis. Constructed conclusions from results of data analysis to be included in abstract.

First Author Information:

Name: Samuel Rosner, MD
Institution: Johns Hopkins Bayview Medical Center
Daytime Phone: 9144827977

Co-Author(s) Associates: Patrick M. Forde MD, Jarushka Naidoo MD, Kristen Marrone MD, Joshua E. Reuss MD, Josephine Louella Feliciano MD, Benjamin Philip Levy MD, Christine L. Hann MD, Victor E. Veleulescu MD, Julie R. Brahmer MD, Valsamo Anagnostou MD

Program Director's Name: Dr. Erien Johnson
(indicating review of abstract)
AMERICAN COLLEGE OF PHYSICIANS

MARYLAND REGION
ANNUAL ASSOCIATES MEETING
MAY 9, 2019

Please check one. First author is:
( X ) RESIDENT
Please check only one. Abstract is submitted to:
( ) Poster
( ) Oral
( x ) Either
General Classification:
( ) Clinical Vignette
( x ) Research Competition
( ) Basic Science
( ) Evidence based medicine review
( ) Quality/Safety
( x ) Clinical Research

Indicate your participation in research process (4 sentences or less): I directed the Solo Se Vive Una Vez (You Only Live Once) public health campaign, overseeing its implementation and evaluation. I submitted the IRB application, managed our team of research assistants, and organized survey and EMR data collection and entry through an online database. I conducted the research analysis and authored the project’s findings for dissemination.

First Author Information:

Name: Harita Shah MD
Institution: Johns Hopkins
Daytime Phone: 309-265-7491
Co-Author(s) Associates:
Suzanne Grieb PhD MSPH, Alejandra Flores-Miller, Kathleen Page MD

Program Director’s Name: Leonard Feldman MD

(indicating review of abstract)
Aspirin efficacy in primary prevention: A meta-analysis of randomized controlled trials

Introduction: The role of aspirin in primary prevention remains controversial. We have conducted a meta-analysis of all randomized controlled trials (RCTs) to evaluate the role of aspirin in primary prevention.

Methods: Literature search in Pubmed, MEDLINE, and Cochrane Library for related RCTs. All-cause mortality was the primary endpoint. Secondary endpoints were major adverse cardiovascular events (MACE), myocardial infarction (MI), cardiovascular mortality, cerebrovascular events, and bleeding events. We used a random effects model to report the risk ratios (RRs) with 95% confidence intervals (CIs).

Results: This analysis included 17 RCTs (164,862 patients; 83,309 received aspirin and 81,744 received placebo). This study did not demonstrate significant reduction in all-cause mortality for patients treated with aspirin when compared with placebo (RR 0.97; 95%CI 0.93-1.01; P=0.13). Sensitivity analysis by excluding healthy elderly (≥65) showed significant reductions of all-cause mortality in the aspirin-treated patients (RR 0.94; 95%CI 0.90-0.99; P=0.01). There were no significant differences between both groups in term of cardiovascular mortality and cerebrovascular events (P>0.05). However, aspirin-treated patients significantly reduced MACE and MI (RR 0.89; 95%CI 0.85-0.93; P<0.001 and RR 0.88; 95%CI 0.78-0.98; P=0.02, respectively), respectively. On the contrary, aspirin was associated with significantly higher incidence of bleeding, including major and intracranial bleeding (P<0.001).

Conclusions: Aspirin use in primary prevention has led to lower incidence of MACE and MI without significantly effecting cerebrovascular events. In contrast, aspirin was associated with higher bleeding risk. The decision regarding aspirin for primary prevention should be thoroughly discussed with patients regarding the risk of cardiovascular disease and bleeding risk.

2019 Mulholland Mohler Resident Meeting

First Author Information:

Name: Ahmad Al-Abdouh, MD
Institution: St Agnes Healthcare
Daytime Phone: 443-882-9334

Co-Author(s) Associates:
Mahmoud Barbarawi, Babikir Kheiri, Yazan Zayed, Inderdeep Gakhal, Owais Barbarawi, Laith Rashdan, Ghassan Bachuwa, Mohammad Luay Alkotob

Program Director’s Name: Sapna Kuehl, MD, F.A.C.P
OLIGOCLONAL BANDING AND SURVIVAL IN PATIENTS RECEIVING TCR INFUSIONS FOLLOWING ASCT. Dina Ioffe, MD, Olga Goloubeva, PhD, MSc, Aaron Rapoport, MD. University of Maryland Medical Center and Baltimore VA Medical Center, Baltimore, MD.

Background: Genetically modified T cell receptors (TCRs) have been shown to be a potential target for immunotherapy in cancer patients. Patients in phase I/II clinical trials who received modified TCRs with high-affinity to myeloma markers following autologous stem cell transplantation (ASCT) demonstrated early, rapid, and robust T cell recovery. We hypothesized that these patients would have a higher frequency of oligoclonal banding (OCB), in which patients express immunoglobulins distinct from their original myeloma M protein. OCB has been associated with early lymphocyte recovery following ASCT and has been shown improve disease-free (DFS) and overall survival (OS). We also hypothesized that study patients would have better DFS compared to patients receiving standard ASCT.

Methods: Our study group consisted of 60 patients who received co-stimulated T cells 2 days after ASCT. The control group consisted of 203 patients who received contemporaneous standard of care ASCTs. Through retrospective chart review, we compiled data on patients’ race, gender, age at transplant, presence and duration of OCB, time from transplant to OCB, risk and stage of disease at diagnosis, disease-free survival (DFS), and overall survival (OS). Length of follow-up was up to 12 years with data collection from 1/30/2007 to 2/1/2019.

Results: Statistical analysis did not reveal a significant difference between the study and control groups based on demographic and clinical characteristics. Univariable Cox regression revealed no statistically significant difference between the groups in OCB or in DFS. Although the multivariable Cox regression (Kaplan-Meier curves) failed to show a statistically significant difference in DFS or OS, hazard ratios showed a trend towards worse OS in the study group as compared to the control (HR 1.48).

Discussion: While initial study results showed a rapid immune response in patients who received TCR infusion post ASCT, our data showed that this did not translate to more robust immune reconstitution (as demonstrated by OCB), or improved DFS or OS. This may demonstrate that the studies’ gene modification targets are not clinically useful. While these TCR targets did not demonstrate improved survival or immune reconstitution, they remain an important target for immunotherapy in this patient population that needs further exploration.

First Author Information:

Name: Dina Ioffe

Institution: University of Maryland Medical Center and Baltimore VA Medical Center

Daytime Phone: 410-328-7567

Co-Author(s) Associates: Aaron Rapoport, MD, Olga Goloubeva, PhD, MSc

Program Director’s Name: Susan D. Wolfsthal

(indicating review of abstract)

ABSTRACT FORM: Must be at least 10-point font. A sharp typeface will help reproduction. Be sure to single-space and STAY WITHIN THE BORDERS!