It’s All About Posters

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Office for Professional Writing, Publishing, and Communication
Overview

• The value of posters
• What’s new in poster design & delivery
• How to craft your message on the wall
• How to engage the audience off the wall
The Value of Posters

• They highlight what’s happening in the field.
• They offer a preview of future papers.
• They summarize interesting work.
• Researcher and audience meet face to face.
• They can be printed and used in interviews.
Or this COVID version
How to Craft Your Message On the Wall

• **Message** - Purpose, Audience, Rule of 3
• **Graphics**
• **Templates**
Craft Your Poster’s Message

- What is your purpose?
- Who is your intended audience?
- What are key takeaways?
Start with the graphics

- https://www.youtube.com/watch?v=LNu3-Cxxk1A
Try Using 3 columns

Clinical Outcomes Following Androgen Receptor Axis Therapies among Men with Prostate Cancer having Major Cardiovascular Diseases or Extreme Polypharmacy: A Population Based Study


Sidney Kimmel Cancer Center at Jefferson, Philadelphia, PA; Jefferson College of Pharmacy, Philadelphia, PA, USA; Lankenau Institute for Medical Research, Wynnewood, PA; Dana Farber Cancer Institute and Harvard TH Chan School of Public Health, Boston, MA.

BACKGROUND

- Vulnerable elderly patients are under-represented in pivotal trials of oral hormonal therapy for prostate cancer (PCa).
- The safety of Androgen Receptor Axis Therapies (ARAT) [Ablisterone, Acetate (AA) and Enzalutamide (ENZ)] among men with major Cardiovascular Diseases (CVDs) or Extreme Polypharmacy (EPP) (>10 concurrent medications) is unknown since patients with these conditions are often excluded from the clinical trials.

OBJECTIVES

To fill knowledge gaps about clinical outcomes following use of two oral hormonal therapies, AA and ENZ, among vulnerable patients.

METHODS

- This retrospective population-based study identified PCa patients from the linked Surveillance, Epidemiology and End Result (SEER)-Medicare files, this database covers about 28% of the US population from all racial/ethnic groups.
- The study cohort consisted of men diagnosed between 1/1/1991 and 12/31/2013 with primary 
- The primary endpoint was 6-month overall mortality from the date of drug initiation.
- Major CVDs include acute myocardial infarction (AMI), atrial fibrillation (AFIB), congestive heart failure (CHF), stroke, and ischemic heart disease (IHD). All cause of death was noted as of December 31, 2015.
- Relative risk (RR) models using a modified Poisson regression method were performed

RESULTS

- Our study included 3,077 patients treated with AA only or AA as first ARAT and 1,143 patients treated with ENZ only or ENZ as first ARAT.
- The characteristics of the patients treated with AA and ENZ were similar. About 65% of patients treated with ARAT had a major CVDs while the proportion of patients with EPP was high (46% for AA and 44% for ENZ).
- The estimated 6-month mortality risk was higher for patients with existing CVDs after AA, ranging from a 27% increase in patients with IHD to 55% in patients with AMI. Mortality was higher for patients with all major CVDs who used ENZ.

CONCLUSIONS

- To our knowledge, this is the largest population-based study to provide outcomes data among patients with CVDs and EPP who may not be represented in many of the pivotal trials.
- The overall mortality of men with CVDs and EPP at 6 months treated with ARAT was elevated suggesting that these patients represent a vulnerable patient population.
- Further studies are needed to determine the clinical benefit of ARAT in men with advanced PCa and CVD/EPP with appropriate guidelines for management.

Table 1. Patient Baseline Demographic and Disease Characteristics

<table>
<thead>
<tr>
<th></th>
<th>AA</th>
<th>ENZ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post Chemotherapy (n=619)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Chemotherapy (n=2,459)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Post Chemotherapy (n=277)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No Chemotherapy (n=866)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age, n(%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;75</td>
<td>318(51)</td>
<td>1066(44)</td>
</tr>
<tr>
<td>≥75</td>
<td>301(49)</td>
<td>1372(56)</td>
</tr>
<tr>
<td>Polypharmacy, n(%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;5</td>
<td>62(10)</td>
<td>403(16)</td>
</tr>
<tr>
<td>≥5</td>
<td>207(33)</td>
<td>982(40)</td>
</tr>
<tr>
<td>≥10</td>
<td>350(57)</td>
<td>1073(44)</td>
</tr>
<tr>
<td>CVDS, n(%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AMI</td>
<td>27(4)</td>
<td>14(5)</td>
</tr>
<tr>
<td>CHF</td>
<td>209(34)</td>
<td>775(32)</td>
</tr>
<tr>
<td>Stroke</td>
<td>75(12)</td>
<td>332(14)</td>
</tr>
<tr>
<td>IHD</td>
<td>368(60)</td>
<td>1379(56)</td>
</tr>
<tr>
<td>All cause of Death, n(%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alive</td>
<td>96(15)</td>
<td>967(39)</td>
</tr>
<tr>
<td>Dead</td>
<td>523(85)</td>
<td>1491(61)</td>
</tr>
</tbody>
</table>

Table 2. Relative Risk (RR) for 6-Month Mortality

<table>
<thead>
<tr>
<th></th>
<th>No CVD</th>
<th>AMI</th>
<th>AFIB</th>
<th>CHF</th>
<th>Stroke</th>
<th>IHD</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA</td>
<td>1.0</td>
<td>1.55(1.16-2.08)</td>
<td>1.40(1.14-1.73)</td>
<td>1.35(1.12-1.62)</td>
<td>1.39(1.03-1.67)</td>
<td>1.27(1.07-1.50)</td>
</tr>
<tr>
<td>ENZ</td>
<td>1.0</td>
<td>1.38(0.84-2.25)</td>
<td>1.53(0.90-2.16)</td>
<td>1.15(0.84-1.57)</td>
<td>1.22(0.82-1.80)</td>
<td>1.23(0.94-1.60)</td>
</tr>
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</table>

ACKNOWLEDGMENT

This study used the linked SEER-Medicare database. The interpretation and reporting of these data are the sole responsibility of the authors. The authors acknowledge the efforts of the National Cancer Institute; the Office of Research, Development and Information, CMS; Information Management Services (IMS), Inc.; and the SEER Program tumor registries in the creation of the SEER-Medicare database.

FUNDING

This project is funded in part by the Department of Health of PA (PA CURE Award SAP # 4100077067) and Cancer Center Support Grant: 5P30CA056036.

Email: grace.lu@jefferson.edu
Mechanistic study of the tumor suppressor role of MITF uncovers actionable translation targeting strategy for prostate cancer

**Raffaella Pippa, Kevin W. Kelly, Karen E. Knudsen, Josep Domingo-Domenech**

Sidney Kimmel Cancer Center, Thomas Jefferson University, Philadelphia, PA 19107, USA

**BACKGROUND**

Prostate cancer (PC) is the most frequently diagnosed noncutaneous malignancy among men in the US. Currently, the mechanisms of prostate tumor progression to a lethal disease stage are not fully understood. We investigated transcription factors (TFs) to understand their role as potential molecular determinants that regulate cells transitioning to a more aggressive phenotype. By interrogating public available transcriptomic datasets and experimental models we have uncovered the potential role of Microphthalmia transcription factor (MITF) in regulating the aggressiveness of PC cells.

**AIMS**

- To decipher the molecular contribution of MITF-controlled mechanisms to lethal PC (LPC) focusing on its potential role on protein synthesis regulation in vitro and in vivo experimental LPC models.
- To identify MITF target genes, potential biomarkers and therapeutic approaches to improve the clinical outcomes.

**METHODS**

We use a combination of molecular and cell biology tools (RNASeq, ChIP-Seq, cell-based assays), comprehensive computational studies using patient datasets and aggregation of PC cell models (data analysis) and translational studies in mice and preclinical samples, such as PDOX and organoids.

**CONCLUSIONS**

<table>
<thead>
<tr>
<th>Protein Synthesis Targeting</th>
<th>Proliferation</th>
<th>Tumorigenesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protein</td>
<td>Synthesis</td>
<td>Targeting</td>
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<td></td>
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</tbody>
</table>

**RESULTS (I)**

**MITF expression is significantly reduced in metastatic LPC**

![Graph showing MITF expression](image)

**RESULTS (II)**

**MITF signature is downregulated in advanced PC patients**

![Graph showing MITF signature](image)

**Figure 4.** A) Modulation of MITF target gene signature determined by sRNA-mediated in vitro gene knockdown in primary and xenograph prostate tumors. Cutoffs and green colors indicate statistical significance (PDR) of induction and suppression of the target gene signatures, respectively (modified QSECA).

**Figure 5.** A) Modulation of MYC target gene signature in MITF depleted cells. NES, normalized enrichment score, FOR, false discovery rate. B) Immunoblot of MYC and AR in MITF depleted cells. C) qRT-PCR of MYC and AR in cells from (B).

**Figure 6.** A) MYC, and AR protein levels in MITF depleted 22Rv1 cells treated with DMSO vehicle or 4E0G1 (50µM). B) Quantification of tumor sphere formation in MITF depleted DU145, 22Rv1 and ARCaP cells treated with DMSO or 4E0G1. C) 4D population doublings in cells from (A). D) Representative visualization of disseminating tumor in mice intravenously injected with control-tagged and MITF depleted 22Rv1 cells treated with vehicle and 4E0G1 (75mg/kg).

**REFERENCES**

Highlight the main point #betterposter

IMMUNIZATION COSTING ACTION NETWORK (ICAN)

Replacing delivery of TT to women of childbearing age with delivery of Td to 7-year-old children via schools may generate the greatest cost savings ($7.1 million) in Vietnam.
Suboxone 8-2mg Q.I.D. treated both cancer pain and opioid use disorder in a patient with metastatic cancer.
Let’s try it: 5-minute poster design
Use the template in the chat.
Cancer Researcher, Epidemiologist, Rookie Biostatistician, Physician

INTRODUCTION

I was facilitating the class with Pam Walter

METHODS

Have had multiple poster presentations over the years

RESULTS

About 2-6 hours depending on whether I know the subject matter or not.

CONCLUSION

So much easier to create.

Follow me on Twitter @nikitta_nk

Nikita
Templates

• Follow the conference guidelines for sizes & templates
• Check if they require landscape or portrait!
• Find Templates at http://creative.jefferson.edu/templates/research-poster/ OR better-poster-templates.com

• Avoid abstracts on posters unless guidelines require it
How to Engage the Audience Off the Wall

• Smile and be friendly
• Have contact info available
• Answer questions this way: BLUF & KISS
What are BLUF & KISS?

Bottom Line
Up Front

Keep It
Short and Simple
### EXAMPLES of BLUF & KISS

<table>
<thead>
<tr>
<th>Type of question</th>
<th>NOT THIS</th>
<th>THIS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BLUF</strong></td>
<td>That’s an interesting question. We took a path that we haven’t explored before. Let me start with giving you a an explanation of how we decided to go this way.</td>
<td>We decided to use XYZ method because ABC didn’t allow us to get as much data.</td>
</tr>
<tr>
<td><strong>KISS</strong></td>
<td>First, let me explain the statistical analysis we used to get this data and then I’ll tell you why this was significant.</td>
<td>The data were significant, based on our modeling.</td>
</tr>
</tbody>
</table>
Deliverable

- Create a poster for your own research or contact Nikita for an assignment
- Submit it by 3/8/21 to Nikita or Pam
  - Fnu.Nikita@Jefferson.edu
  - Pamela.Walter@Jefferson.edu
- Receive 3 pts toward SciComm badge
Resources for building posters

• “Ten Simple Rules for a Good Poster Presentation.”
  https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1876493/

• Mike Morrison https://twitter.com/mikemorrison

• Jefferson Research Poster Templates
  https://www.jefferson.edu/university/teaching-learning/graphics-medical-illustration.html

• For poster consultations: Pamela.Walter@Jefferson.edu