Geriatric Cardiology
MEMBER SECTION

Virtual Section Meeting

May 13, 2020 | 7 p.m. ET

Vulnerability of Older Adults to COVID-19: Emerging Role for Biological Hallmarks of Aging and Geroscience-Guided Therapies

Dr. George A. Kuchel, MD, FRCP, AGSF, FGSA

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Panel Discussion

- James Kirkpatrick, MD, FACC- *Chair*
- Karen Alexander, MD, FACC- *Immediate Past Chair*
- Mathew Maurer, MD, FACC
- Michael Rich, MD, FACC

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Abstract Presentations and Discussion

Scott Hummel, MD

Jon Afilalo, MD, FACC

Congratulations!

Lina Brinker, MD

Hospitalist and Clinical Lecturer

University of Michigan

Polypharmacy, Multimorbidity and Therapeutic Competition in HFpEF #13057

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Congratulations!

Kamil Faridi, MD
Assistant Professor of Medicine
Section of Cardiovascular Medicine
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New Haven, CT

Assessing Frailty-Associated Characteristics and Outcomes in the Dual Antiplatelet Therapy (DAPT) Study Using Medicare Claims: Insights from the EXTEND-DAPT Study #16839

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Polypharmacy, Multimorbidity and Therapeutic Competition in HFpEF

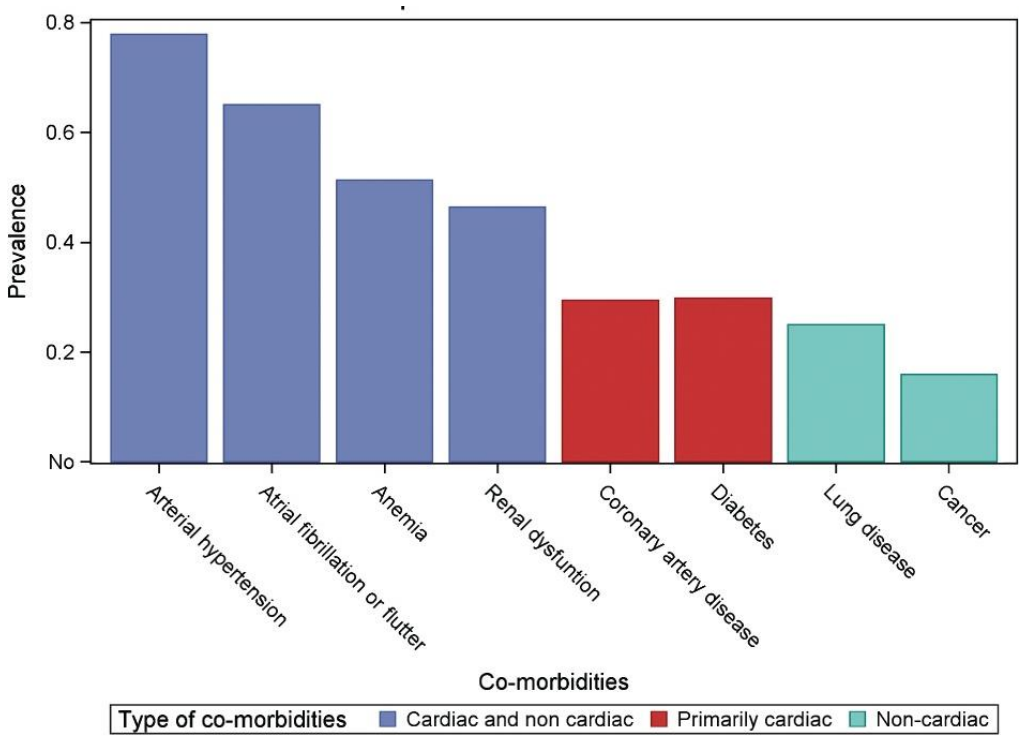
Lina M. Brinker MD, Mary E. Tinetti MD, Matthew C. Konerman MD, Cristen J. Willer PhD, Jennifer L. McNamara MS, Scott L. Hummel MD MS, and Parag Goyal MD MSc

Disclosures - None

Background I

Heart failure with preserved ejection fraction (HFpEF): Challenging to manage

- Complex condition with high burden of comorbidities
- Primarily a geriatric disease (mean age >70 in most studies)
- Inconsistent diagnostic criteria
- Lack of interventions that improve outcomes
- Medication complexity further complicates these issues



Lund L et al, European J HF, 2014

Background II

Medication complexity in HFpEF

- Given the high prevalence of comorbidities, cardiac and noncardiac medications are common
- This leads to complex medication regimens, which predispose older adults to adverse outcomes
- Several factors contribute to medication complexity, including:
    1. Polypharmacy: taking multiple medications (we defined as ≥ 10)
    2. Potentially inappropriate medications (PIMs): medications with risks that may outweigh benefits—especially in older adults
    3. Therapeutic competition: a type of drug-disease interaction
- Medication complexity—well-described in the geriatrics literature—has not been studied in HFpEF

Objective

To investigate potentially harmful medication patterns in older adults with HFpEF by characterizing polypharmacy, PIMs, and therapeutic competition

Methods I

- Study population: 231 adults seen in a specialized HFpEF clinic at the University of Michigan from 7/2016 - 9/2019

- Chart review to characterize the following:
  - Comorbidity burden
  - Polypharmacy
  - Use of PIMs, defined 3 ways
  - Therapeutic competition

Methods II: PIMs

1. AHA HF-exacerbating agents:

Medications considered by the American Heart Association to increase the risk of causing or worsening heart failure, per their 2016 Scientific Statement

Drugs That May Cause or Exacerbate Heart Failure

A Scientific Statement From the American Heart Association

Common examples include:

- Non-dihydropyridine CCBs
- Metformin
- Sulfonylureas
- Thiazolidinediones
- DPP-4 inhibitors
- NSAIDs
- Citalopram

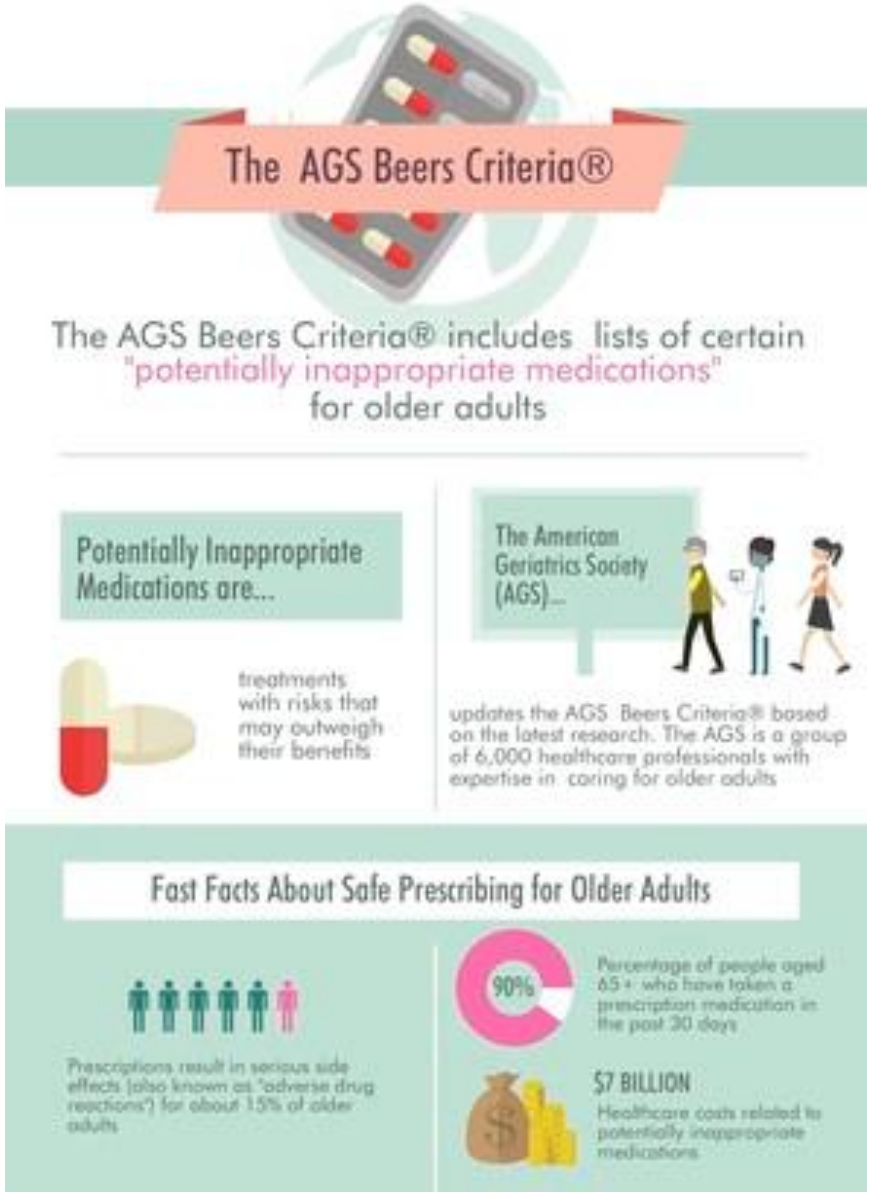
Page et al, Circulation 2016

Methods III: PIMs

2. Beers agents:

- Medications strongly recommended against using in older adults by the American Geriatric Society's Beers Criteria 2019 update

- Common examples include:
  - NSAIDs
  - Sulfonylureas
  - Thiazolidinediones
  - Tricyclic antidepressants
  - First generation antihistamines (diphenhydramine, hydroxyzine)
  - Nonselective alpha-1 blockers (terazosin, doxazosin, prazosin)



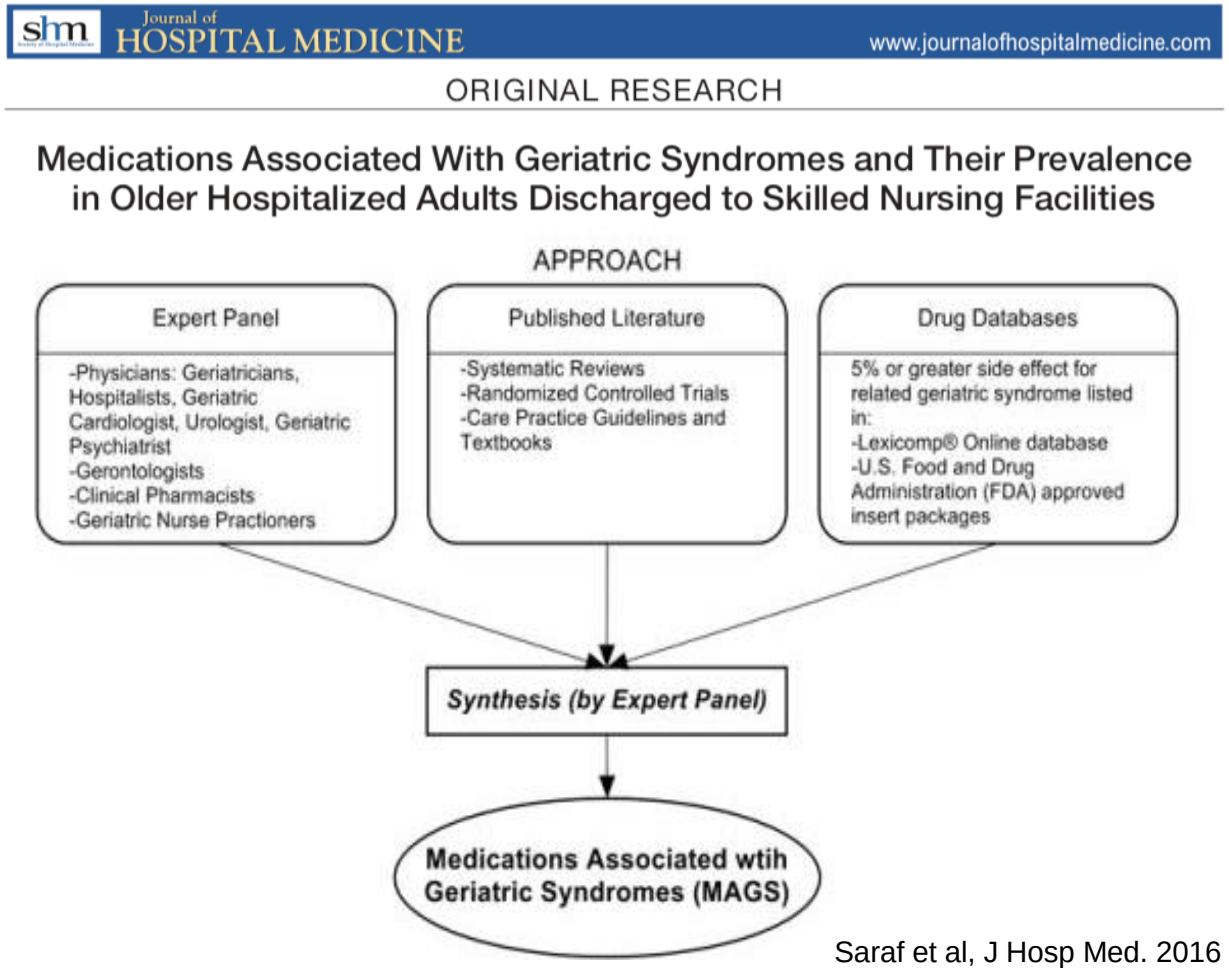
American Geriatrics Society

Methods IV: PIMs

3. Medications associated with geriatrics syndromes (MAGS)

Medications which may contribute to one or more of these common geriatric syndromes:

- Falls
- Urinary incontinence
- Delirium
- Reduced appetite or weight loss
- Depression
- Cognitive impairment

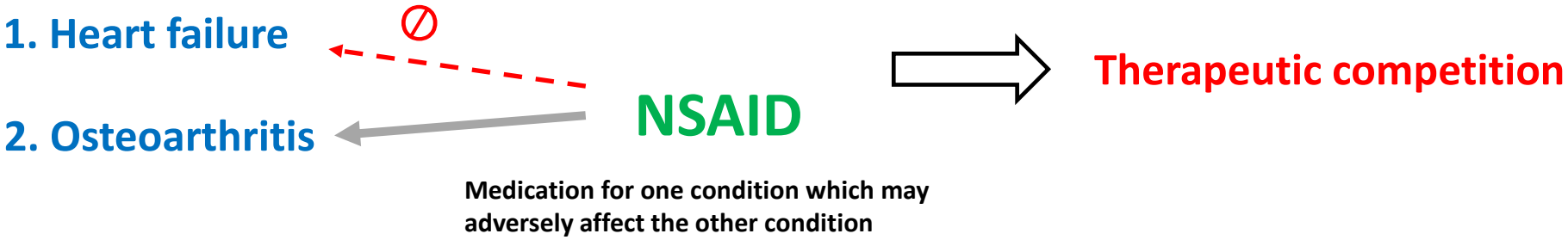


Saraf et al, J Hosp Med. 2016

Methods V: Therapeutic competition

- Defined as a type of drug-disease interaction in which the treatment for one condition may adversely affect a coexisting condition

Competing conditions:



OPEN ACCESS Freely available online

PLOS ONE

Potential Therapeutic Competition in Community-Living Older Adults in the U.S.: Use of Medications That May Adversely Affect a Coexisting Condition

Songprod Jonathan Lorgunpai[1], Marianthe Grammas[2], David S. H. Lee[3], Gail McAvay[2], Peter Charpentier[2], Mary E. Tinetti[2,4]*

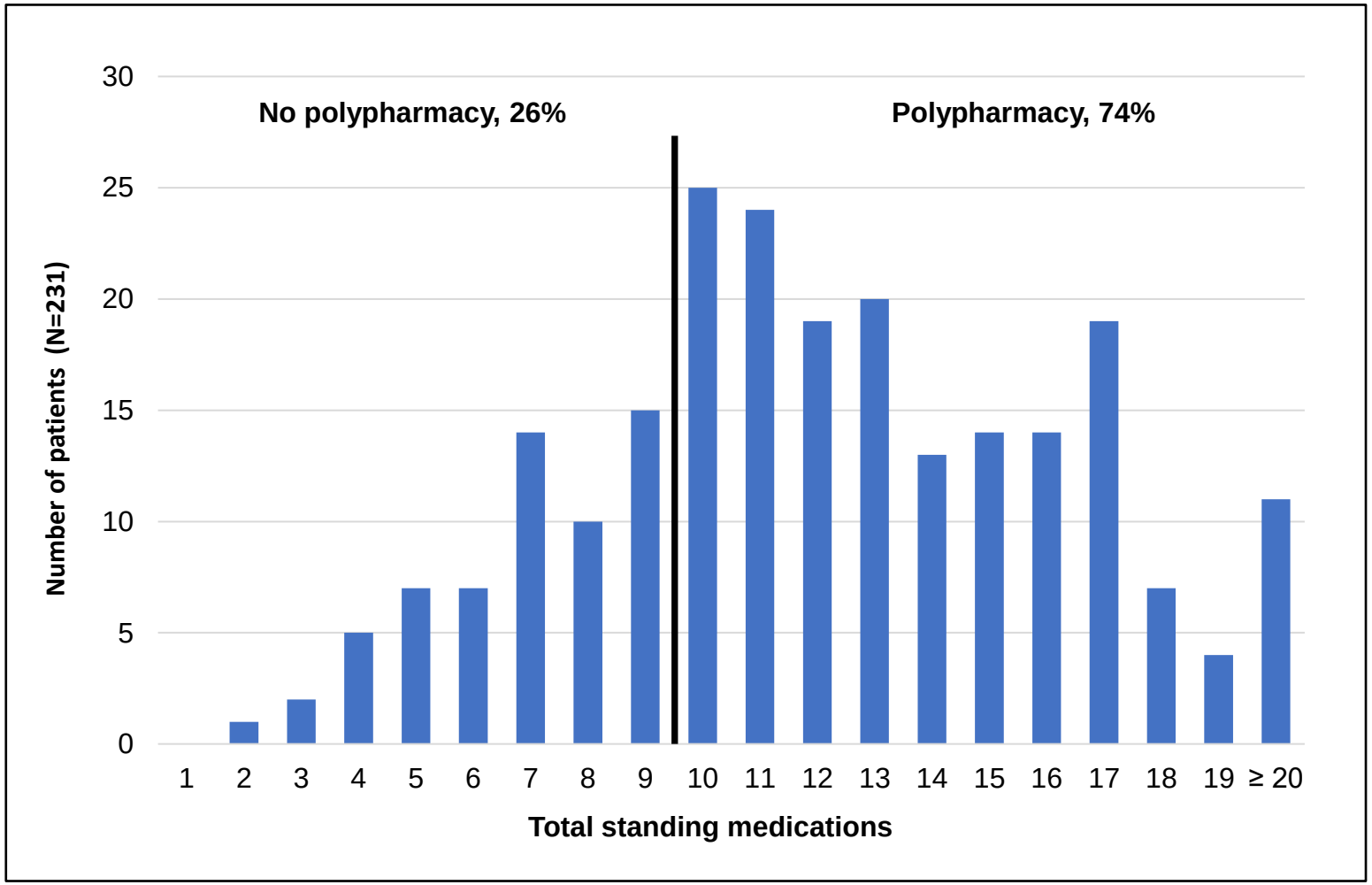
Results I: HFpEF patient characteristics

Demographics	
Age in years, mean ± SD	68 ± 12
Age ≥ 65 years, n (%)	146 (63)
Female, n (%)	147 (64)
White, n (%)	209 (90)
Count of comorbid conditions, median (IQR)	7 (5-8)
Prevalence of comorbid conditions, n (%)	
Hypertension	191 (83)
Obesity	167 (72)
Obstructive sleep apnea	156 (68)
Dyslipidemia	156 (68)
Diabetes	112 (48)

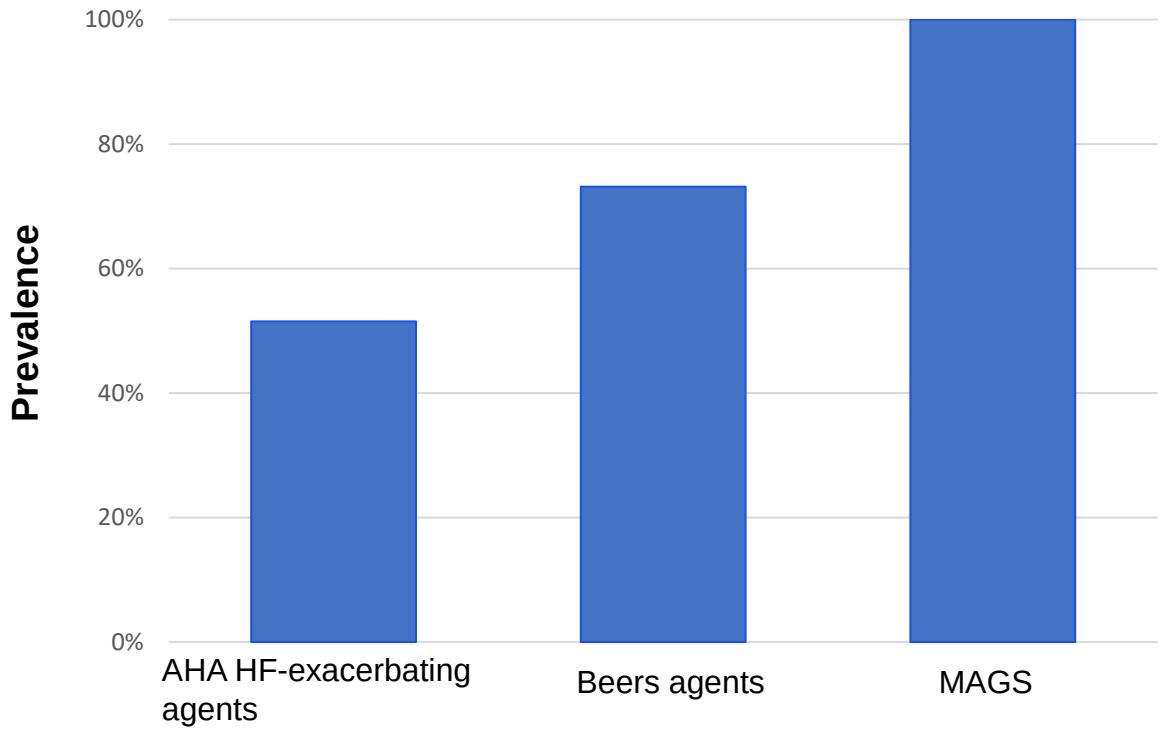
Prevalence, cont'd	
Atrial fibrillation/flutter	105 (45)
Gastroesophageal reflux disease or peptic ulcer disease	102 (44)
Chronic kidney disease	98 (42)
Coronary artery disease	86 (37)
Osteoarthritis	86 (37)
Hypothyroidism	69 (30)
Depression	62 (27)
Chronic obstructive pulmonary disease	62 (27)
Osteoporosis	27 (12)
Benign prostatic hyperplasia	12 (5)
Dementia or cognitive impairment	9 (4)
Cirrhosis	7 (3)

Results II: Polypharmacy

- 170 of 231 (74%) were taking 10 or more medications (polypharmacy)
- Mean 12 ± 4, Median 12 (IQR 9-15)



Results III: PIMs



- **Every patient took at least 1 PIM**
- **Median 7 (IQR 5-9)**

AHA HF-exacerbating agents, n (%)	
Metformin	43 (19)
Non-dihydropyridine CCB	26 (11)
Citalopram or escitalopram	18 (8)
Sulfonylurea	16 (7)
NSAID	16 (7)
Hydroxychloroquine	13 (6)
Albuterol	9 (4)

Beers agents, n (%)	
Proton pump inhibitor	115 (50)
Non-dihydropyridine CCB	26 (11)
Sulfonylurea	16 (7)
NSAID	16 (7)
Amiodarone	13 (6)
Sliding scale insulin	11 (5)
Paroxetine	9 (4)

MAGS, n (%)	
Loop diuretic	186 (81)
Beta blocker	153 (66)
ACEI/ARB	112 (48)
Calcium channel blocker	62 (27)
Selective serotonin reuptake inhibitor	60 (26)
Insulin	54 (23)
Thiazide diuretic	53 (23)

Results IV: Therapeutic competition

- 81% had at least one pair of competing health conditions
- Among those with a pair of competing conditions, 49% were taking a medication which could worsen one condition
- Inhaled beta agonists were most common

Most common combinations of possible therapeutic competition:

Condition pairs, n (%)			**Medication causing therapeutic competition, n (%)**	
HTN	COPD	55 (24)	Beta agonist	31 (13)
HF	DM	112 (48)	Beta blocker with alpha-blocking activity	20 (9)
HTN	DM	106 (46)	Beta blocker with alpha-blocking activity	19 (8)
HF	COPD	62 (27)	Nonselective beta blocker, *or* Beta blocker with alpha-blocking activity	14 (6)
HTN	COPD	55 (24)	Nonselective beta blocker, *or* Beta blocker with alpha-blocking activity	13 (6)
CAD	COPD	28 (12)	Beta agonist	13 (6)
GERD	Osteoporosis	20 (9)	Proton pump inhibitor	14 (6)

Limitations

- Single-site observational study
- Medication and comorbidity data were collected from the electronic medical record and may be incomplete or inaccurate
- We included only scheduled medications

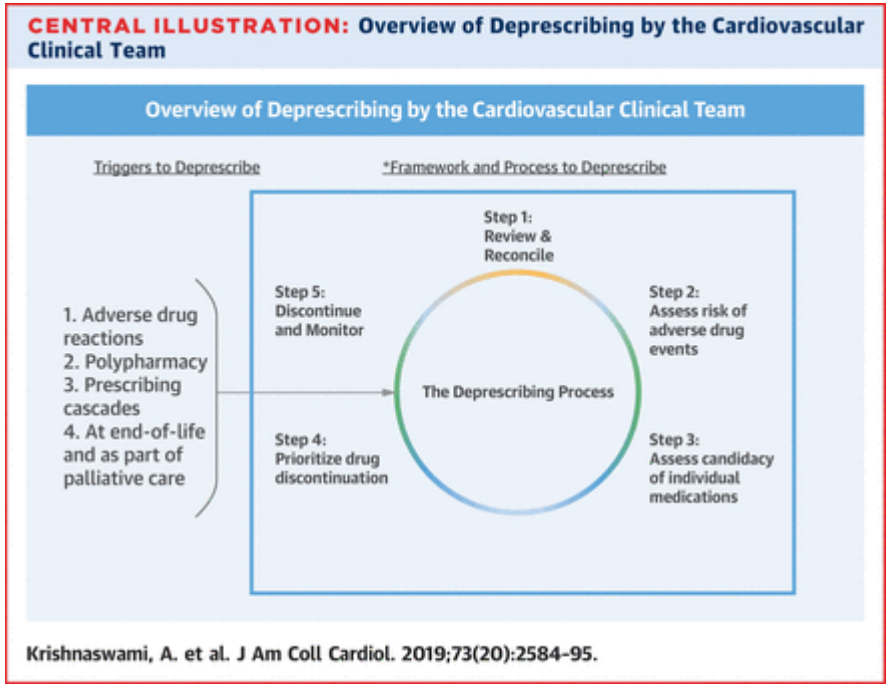
Conclusions

- Polypharmacy is highly prevalent, affecting around 75% of HFpEF patients
- Additional factors that contribute to medication complexity include:
  - Universal PIM use
  - Therapeutic competition, which is more prevalent in HFpEF than in the general geriatric population

Implications

- Need for patient-centered approaches to manage medication complexity in HFpEF, including:
  - Developing strategies to address medication burden in this primarily geriatric population
  - Considering how PIMs are defined in the setting of HFpEF, for example:
    - There is some data that Metformin may actually be beneficial in HFpEF
    - Some patients require loop diuretics to manage their symptoms
  - Developing approaches for addressing therapeutic competition: medications with benefits > risks should be continued, those with risks > benefits discontinued

- Formal processes to maximize medication reconciliation and deprescribing should be broadly incorporated into the care of HFpEF patients:
  - From specialized HFpEF programs to primary care



Thank you!

- Dr. Parag Goyal, Weill Cornell Medicine
- Dr. Scott Hummel, University of Michigan
- Jen McNamara, MS, UofM Cardiovascular Center clinical research manager

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- @LinaBrinker

Discussion

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Assessing Frailty-Associated Characteristics and Outcomes in the Dual Antiplatelet Therapy (DAPT) Study Using Medicare Claims: Insights from the EXTEND-DAPT Study

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ACC Geriatric Cardiology Section Virtual Meeting
May 13th, 2020

Yale Cardiovascular Medicine

Yale University
School of Medicine

Financial Disclosures

- I have no relevant disclosures

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Background

- Frailty is a state of decreased physiologic reserve with increased vulnerability to stressors, and is associated with increased mortality[1]

- Frailty is not frequently assessed in observational studies or in randomized clinical trials of patients with coronary artery disease (CAD)

- Nearly 1 in 5 patients ≥65 years old with CAD and nearly 1 in 3 patients with acute coronary syndrome (ACS) have evidence of frailty[2,3]

[1]Bergman H et al. J Gerontol A Biol Sci Med. 2007.
[2]Singh M et al. Circ Card Qual Outcomes. 2011.
[3]Bebb et al. Eur Heart J Acute Card Care. 2018.

Background

- Many of the risks and benefits of therapies for CAD in frail patients remain uncertain
- Frail patients with CAD are less likely to receive therapies such as cardiac catheterization or medications for secondary prevention[1]
- Older, frailer patients have increased short-term risk of bleeding and bleeding-related death[2-4]

[1]Afilalo J et al. J Am Coll Cardiol. 2014.
[2]Alonso GL, et al. Int J Cardiol. 2016.
[3]Perera V, et al. Age Ageing. 2009.
[4]Dodson JA, et al. JACC Card Interv. 2018.

Background

- Dual antiplatelet therapy (DAPT) with ASA + P2Y12 inhibitor is recommended for 6 to 12 months following PCI, and continuation of DAPT for longer can be considered based on ischemic and bleeding risks[1]

- The long-term impact of frailty on adverse clinical events for patients who undergo PCI and receive DAPT is unknown

- Use of administrative claims data in clinical trials may help us better assess risks and benefits associated with frailty

[1]Levine et al. 2016 ACC/AHA Guideline Focused Update. J Am Coll Cardiol. 2016.

Study Objectives

- Assess whether frailty-associated characteristics derived from claims data are associated with adverse clinical events in patients after PCI

- Determine whether frailty-associated characteristics impact treatment effects of extended duration DAPT after PCI

Methods

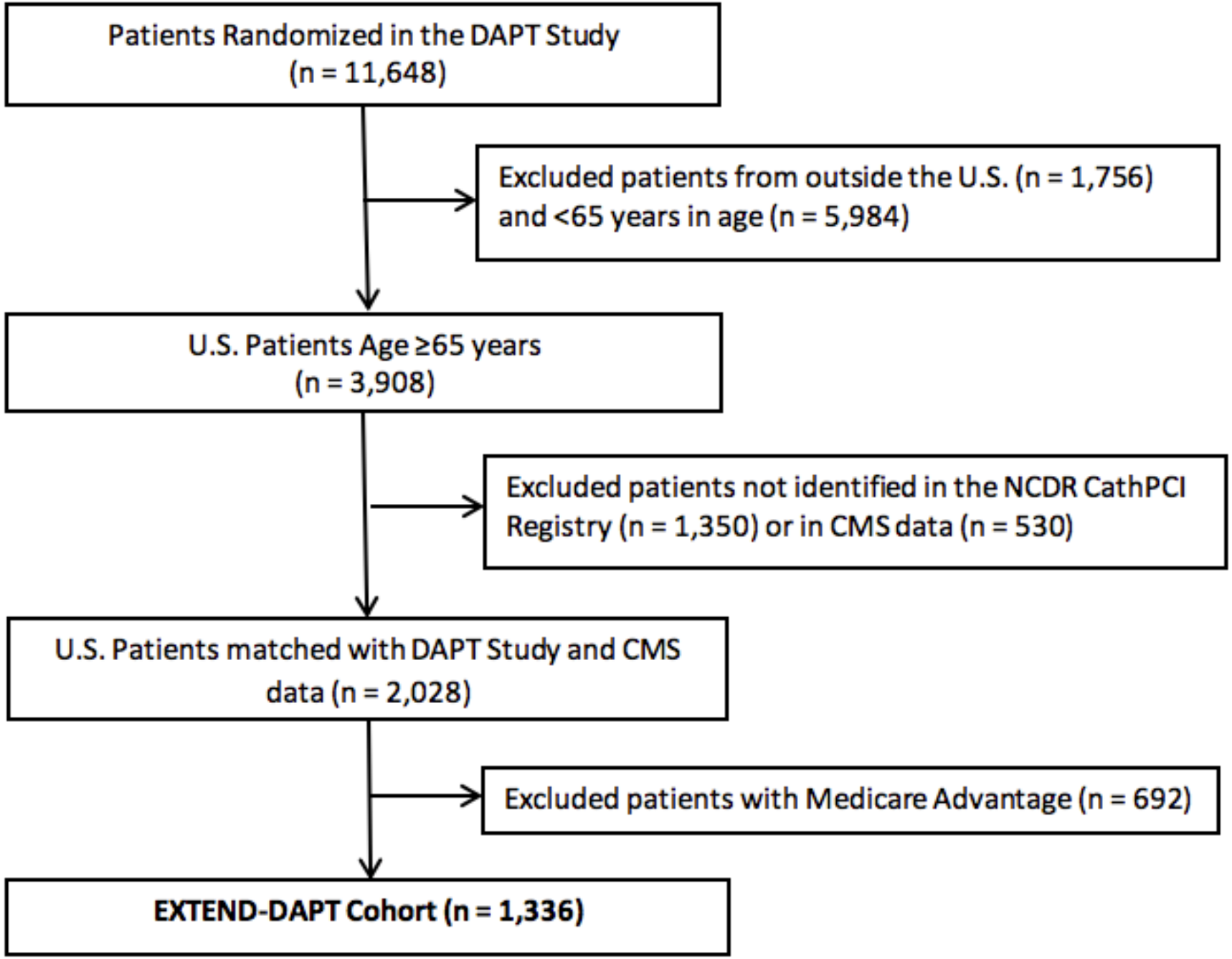
- DAPT Study[1]
  - Randomized, placebo-controlled clinical trial comparing outcomes for patients who received 30 vs. 12 months of DAPT following PCI
  - Patients randomized at 1 year following PCI if no ischemic or bleeding events occurred following PCI
  - Extended duration DAPT reduced the risk of MACCE events but also increased risk of bleeding

[1]Mauri et al. NEJM 2014.

Methods

- DAPT Study data was linked with Medicare claims data as part of the Extending Trial-Based Evaluations of Medical Therapies Using Novel Sources of Data (EXTEND) Study

- Deterministic algorithms were used to match patients ≥65 years old with the NCDR CathPCI Registry linked to Medicare claims


Patients Randomized in the DAPT Study
(n = 11,648)
Excluded patients from outside the U.S. (n = 1,756)
and <65 years in age (n = 5,984)
U.S. Patients Age ≥65 years
(n = 3,908)
Excluded patients not identified in the NCDR CathPCI
Registry (n = 1,350) or in CMS data (n = 530)
U.S. Patients matched with DAPT Study and CMS
data (n = 2,028)
Excluded patients with Medicare Advantage (n = 692)
EXTEND-DAPT Cohort (n = 1,336)

Methods

- Frailty-Associated Characteristics
  - Used inpatient ICD-9 diagnosis codes associated with frailty in prior studies[1,2]
  - Patients analyzed based on number of frailty characteristics

[1] Segal JB, et al. Med Care. 2017.
[2] Kim DH, et al. J Gerontol A Biol Sci Med Sci. 2018.

Frailty characteristics based on ICD-9 codes:

- impaired mobility or falls
- hospital beds and associated supplies
- wheelchairs and accessories
- walking aids and attachments other supplies
- transportation services including ambulance
- ill-defined and unknown causes of morbidity
- psychotic conditions
- hereditary/degenerative diseases of the central nervous system
- other psychoses
- neurotic and other nonpsychotic mental disorders
- open wound of lower limb
- contusion with intact skin surface
- chronic skin ulcer
- diseases of veins/lymphatics
- arthropathies and other musculoskeletal disorders
- other bacterial diseases
- pneumonia and influenza
- skin and soft tissue infections
- mycoses
- other diseases of the urinary system

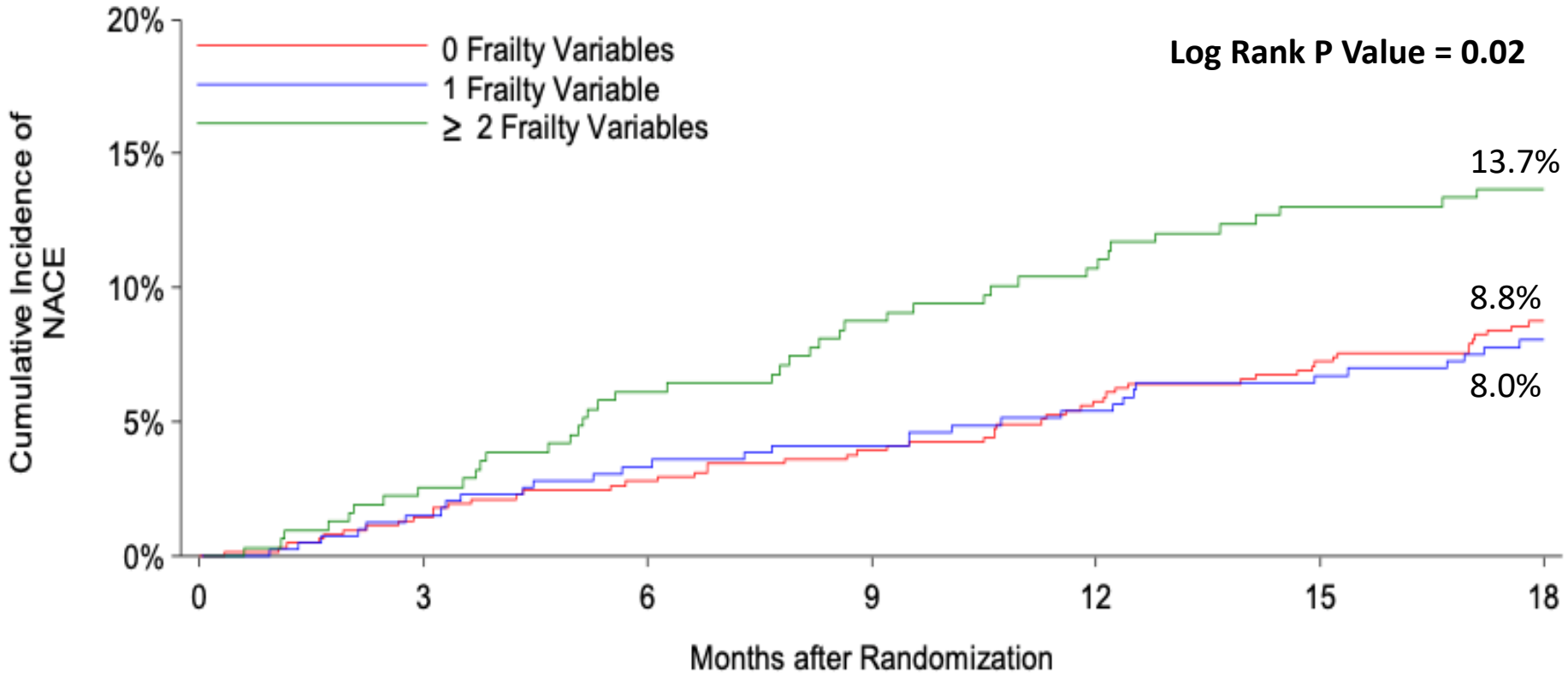
Methods

- Outcomes
  - Net adverse clinical events (NACE; composite of death, MI, stroke, and bleeding)
  - Death
  - MI
  - Stroke
  - Bleeding
- Rates of adverse outcomes and treatment effects of extended duration DAPT were determined based on presence of frailty-associated characteristics

Results – Baseline Characteristics

Characteristic	0 Frailty Characteristics (n = 614)	1 Frailty Characteristic (n = 397)	≥2 Frailty Characteristics (n = 315)	P value
Age (mean, SD)	71.3, 5.2	72.1, 5.5	72.5, 5.8	**0.003**
Female	26.1	32.7	46.3	**<0.001**
Nonwhite Race	5.7	7.6	7.1	0.485
BMI (mean, SD)	29.5, 5.0	29.5, 5.3	29.9, 5.9	0.462
Diabetes Mellitus	32.8	33.6	34.0	0.928
Hypertension	84.6	84.4	87.5	0.422
Current/Recent Smoking	8.1	15.0	12.8	**0.002**
Prior Stroke/TIA	4.4	5.8	7.0	0.244
History of Major Bleeding	0.8	0.8	1.6	0.461
Prior PCI	33.2	39.3	33.3	0.103
Prior CABG	16.2	15.7	18.4	0.579
Prior Myocardial Infarction (MI)	21.3	22.3	18.5	0.483
Atrial Fibrillation	4.8	5.8	3.5	0.348
Index PCI - STEMI	3.7	4.5	3.8	0.807
Index PCI - NSTEMI	11.4	10.1	11.1	0.799
Index PCI – Unstable Angina	15.6	13.4	16.5	0.457
Index PCI – Stable Angina	44.1	45.6	45.7	0.859

Results – Cumulative Incidence of NACE Based on Frailty-Associated Characteristics



Results – Cumulative Incidence of Events Based on Frailty-Associated Characteristics

Outcome	0 Frailty Characteristics	1 Frailty Characteristic	≥2 Frailty Characteristics	Log Rank P Value
NACE	**8.8**	**8.0**	**13.7**	**0.02**
Death	2.3	1.8	3.9	0.19
MI	3.8	2.9	4.6	0.48
Stroke	**0.5**	**2.4**	**2.0**	**0.03**
Bleeding	4.0	3.4	6.0	0.21

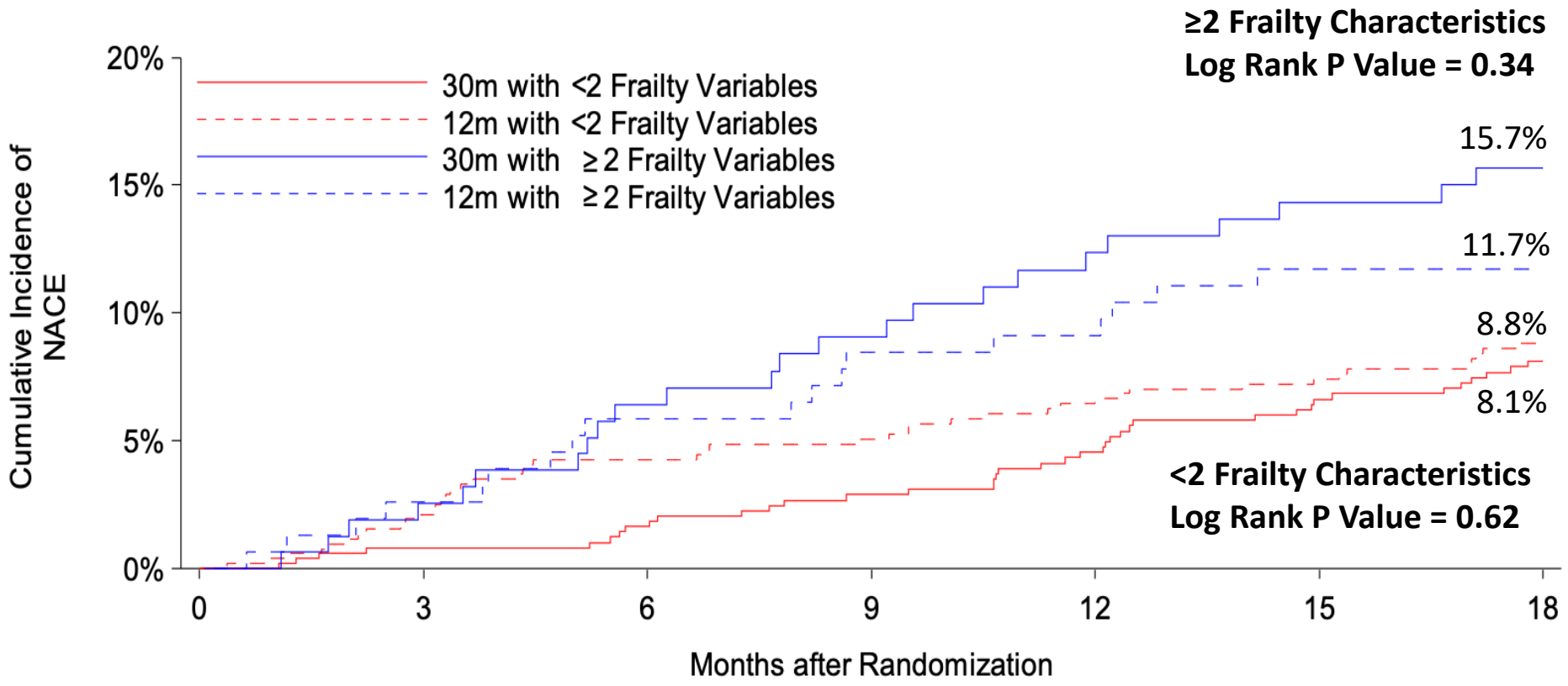
Results – Adjusted* Risks of Adverse Outcomes by Number of Frailty-Associated Characteristics

Outcome	1 Frailty-Associated Characteristic HR [95% CI]	P value
NACE	0.92 [0.60-1.39]	0.68
Death	0.76 [0.32-1.79]	0.53
MI	0.81 [0.43-1.56]	0.53
Stroke	**3.73 [1.18-11.81]**	**0.03**
Bleeding	0.93 [0.50-1.71]	0.81

Outcome	≥2 Frailty-Associated Characteristics HR [95% CI]	P value
NACE	**1.57 [1.06-2.33]**	**0.03**
Death	1.72 [0.82-3.60]	0.15
MI	1.35 [0.73-2.50]	0.34
Stroke	**4.18 [1.25-13.97]**	**0.02**
Bleeding	1.42 [0.78-2.57]	0.25

*The following variables were included in adjusted analyses: age, sex, total number of lifestyle cardiovascular risk factors [diabetes, hypertension, smoking, and obesity], presence of an additional cardiovascular risk factor (any one of the following variables: prior PCI, prior CABG, prior stroke or TIA, prior MI, or MI at time of index PCI) , and DAPT Study arm (30 or 12 months of DAPT)

Results – Cumulative Incidence of NACE Based on Frailty-Associated Characteristics and Duration of DAPT



Results – Cumulative Incidence of Outcomes for Patients with < 2 Frailty-Associated Characteristics Based on DAPT Duration

Outcome	30 Months <2 Frailty Ch.	12 Months <2 Frailty Ch.	Log Rank P Value
NACE	8.1	8.8	0.62
Death	2.5	1.8	0.44
MI	3.3	3.5	0.83
Stroke	1.1	1.4	0.61
Bleeding	4.4	3.2	0.34

Results – Cumulative Incidence of Outcomes for Patients with ≥ 2 Frailty-Associated Characteristics Based on DAPT Duration

Outcome	30 Months ≥2 Frailty Ch.	12 Months ≥2 Frailty Ch.	Log Rank P Value
NACE	15.7	11.7	0.34
Death	5.2	2.6	0.24
MI	4.0	5.3	0.59
Stroke	2.0	2.0	1.00
Bleeding	**8.7**	**3.3**	**0.06**

Results – Risk of Outcomes for 30 vs. 12 Months of DAPT by Number of Frailty-Associated Characteristics

Outcome	30 vs. 12 Mos. DAPT <2 Frailty Characteristics HR [95% CI]	30 vs. 12 Mos. DAPT ≥2 Frailty Characteristics HR [95% CI]	Interaction P value
NACE	0.90 [0.59-1.38]	1.35 [0.73-2.48]	0.28
Death	1.40 [0.59-3.32]	2.01 [0.61-6.68]	0.63
MI	0.93 [0.47-1.82]	0.75 [0.26-2.16]	0.74
Stroke	0.74 [0.24-2.35]	1.00 [0.20-4.94]	0.77
Bleeding	1.27 [0.69-2.33]	2.38 [0.92-6.20]	0.08

Limitations

- ICD codes have not been previously used to directly define frailty
- Results could differ with use of ICD-10 codes
- Analyses may be underpowered
- Inclusion and exclusion criteria may limit generalizability
- All treatment effects should be considered exploratory

Conclusions

- Frailty-associated characteristics in claims data were associated with higher NACE in a subgroup of older patients in the DAPT Study
- No differences in treatment effects for extended duration DAPT following PCI were seen for patients with increased frailty
- However, our findings suggest further study in this area is needed
- This study supports use of claims data to augment risk prediction and better assess heterogeneity of treatment effects in cardiovascular clinical trials

Acknowledgements

- Co-investigators: Harun Kundi, Jordan B. Strom, Jeptha Curtis, Qi Gao, Yang Song, Hector Tamez, Laura Mauri, Changyu Shen

- PI: Robert Yeh

- American College of Cardiology National Cardiovascular Data Registry (NCDR)

- This research is supported by with funding from the National Heart, Lung, and Blood Institute (1R01HL136708-01, Yeh)

Thank you!

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Discussion

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FIT and Early Career Opportunities

Parag Goyal, MD, MSc, FACC

Opportunities for FITs and ECPs in Geriatric Cardiology

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Assistant Professor of Medicine, Weill Cornell Medicine
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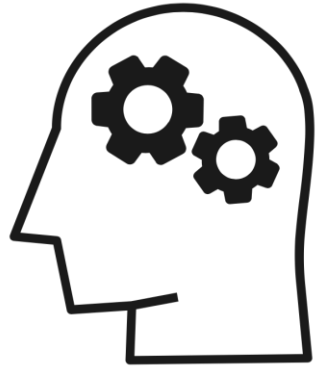
My Early Career Path

- **2015**: Joined ACC GCS
- **2016**: Get Going RCT, ECCOA/JGC
- **2017**: U13 Conference/Travel Award
- **2017**: GEMSSTAR awarded (joined faculty)
- **2018**: JACC Council Perspective
- **2018**: Started HFpEF Program for the Aging
- **2019**: Submitted Beeson application

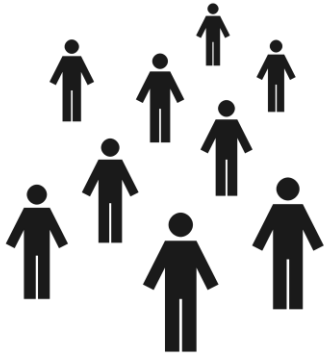
ACC Geriatric Cardiology Section as a Resource

Exposure to Geriatric Cardiology content/expertise



Acquisition of skills and knowledge

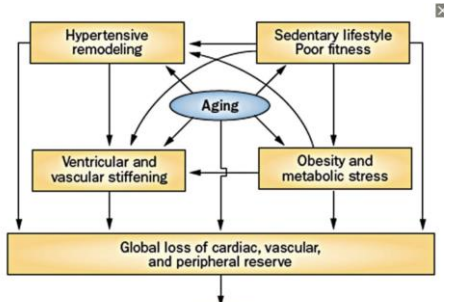
Career development opportunities



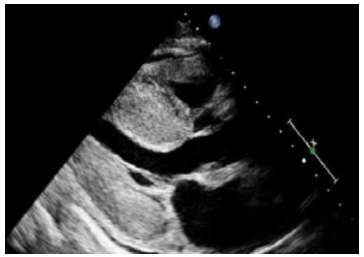
Network of sponsors and mentors

The Time is Now for Geriatric Cardiology

TAVR



HFpEF



Cardiac Amyloidosis

Palliative Care

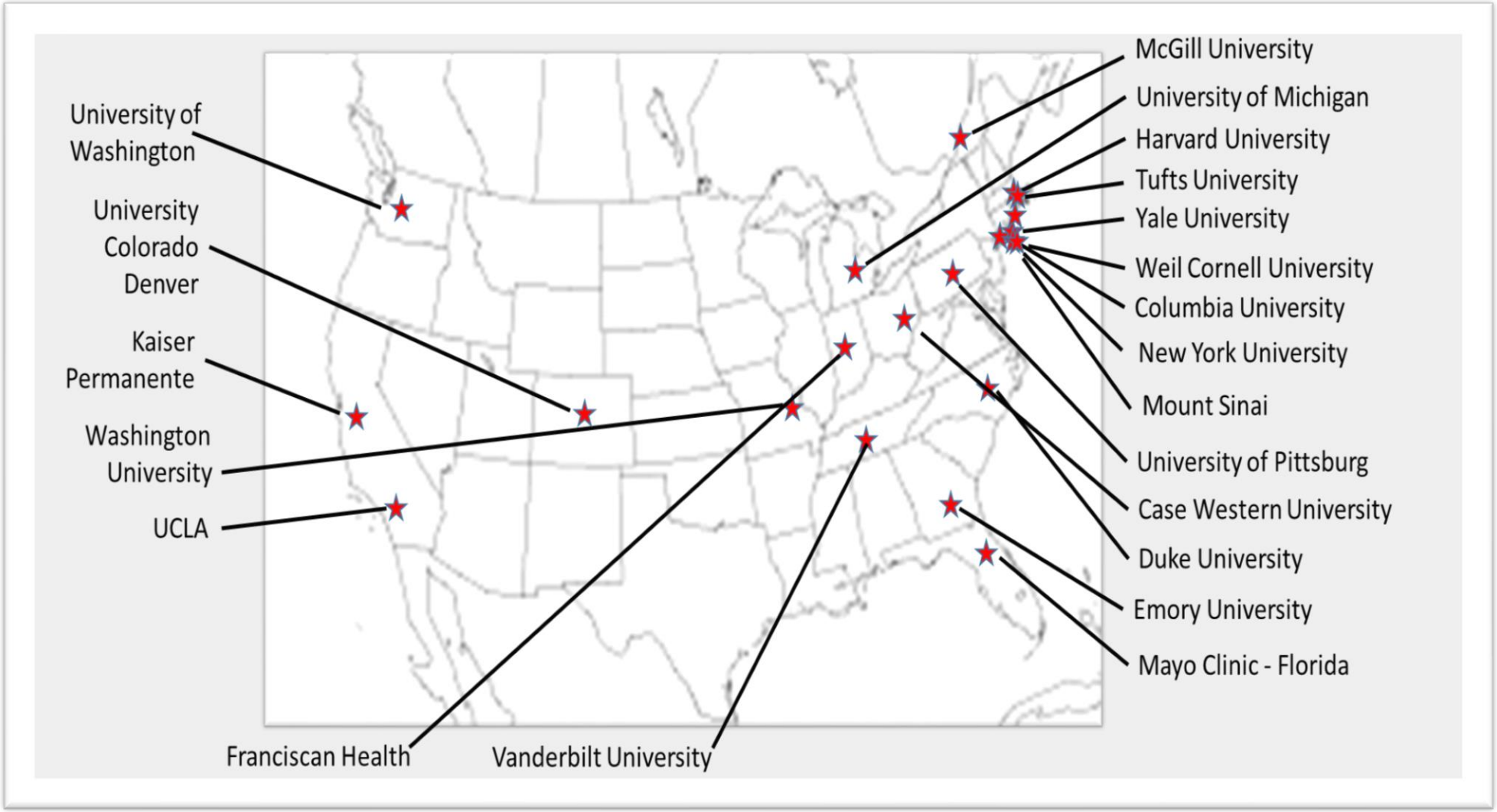
PREVENTABLE NIH

PRagmatic EValuation of evENTs And Benefits of Lipid-lowering in oldEr adults

Statins for Primary Prevention

Polypharmacy/Deprescribing

A Growing Field/Network



How to get involved?

- ACC GCS Membership
  - Sign-up for membership
- ACC GCS FIT/ECP Working Group
- ACC Microvolunteering
  - Sing up via Membership Home Page
- ACC GCS FIT/ECP Working Group Leadership Panel
  - Call for applications

ACC GCS FIT/ECP Leadership Panel

- *Purpose*:
  - To **engage** and **cultivate** the careers of trainees and junior faculty with an interest in Geriatric Cardiology.
  - Through this position, Representatives will have the opportunity to **actively participate** in ACC, **work with thought leaders** in Geriatric Cardiology, and **advance the field** to ultimately improve the care of older adults with cardiovascular disease

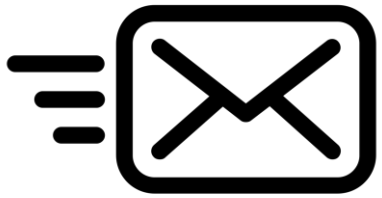
- *Eligibility*:
  - Current FIT or ECP (within 5 years of training)
  - Interest in joining the Research WG, Palliative Care WG, or ACC.org Editorial WG

ACC GCS FIT/ECP Leadership Panel

- *Responsibilities*:
  - Participate in Working Group activities, which include regular conference calls and various ad-hoc activities intended to advance the field of Geriatric Cardiology.
  - Serve on the ACC Geriatric Cardiology Section FIT/ECP Working Group Leadership Panel

(INSERT LINK FOR APPLICATION HERE)

Thank you!



pag9051@med.cornell.edu

@ParagGoyalMD

Weill Cornell Medicine

Virtual Reception and Discussion

- Please use the chat box to the right of your screen
- We will attempt to unmute participants when possible
- Email mdisch@acc.org with any issues or follow up questions

AMERICAN COLLEGE of CARDIOLOGY

Meet the Leadership Council

James N. Kirkpatrick, MD, FACC

Chair, ACC Geriatric Cardiology Section Leadership Council

Institution: University of Washington
Email: kirkpatj@cardiology.washington.edu
Social media: @Kirkpatj1
Clinical/research interests: Cardiac palliative care, cardioethics, end of life management of cardiac devices, advance care planning for older adults.

Karen P. Alexander, MD, FACC

Immediate Past Chair, ACC Geriatric Cardiology Section Leadership Council

Institution: Duke University/Duke Clinical Research Institute
Phone: 919-668-8871
Email: *Karen.alexander@duke.edu*
Social media: @KAlexanderMD
Clinical/research interests: Frailty assessment, clinical registries, outcomes in older patients with CV disease considering geriatric conditions.

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Meet the Leadership Council

Aaron J. Bagnola, PharmD, BCPS, BCCP

Member, Geriatric Cardiology Section Leadership Council

Institution: Inova Fairfax Medical Campus
Email: *Aaron.Bagnola@inova.org*
Social media: @AirInBags
Clinical/research interests: Cardiac Critical Care, Advanced Heart Failure, and Pulmonary Hypertension

Susan Cheng, MD

Member, Geriatric Cardiology Section Leadership Council

Kelsey M. Flint, MD, FACC

Member, Geriatric Cardiology Section Leadership Council

Social media: @kfmarie

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Meet the Leadership Council

Scott L. Hummel, MD

Member, Geriatric Cardiology Section Leadership Council

Social media: @SHummelMD

Richard A. Josephson, MS, MD, FACC, FAHA, FACP, FAACVPR

Member, Geriatric Cardiology Section Leadership Council

Institution: University Hospitals Health System & Case Western Reserve University

Email: *Richard.Josephson@UHhospitals.org*

Clinical/research interests: Secondary prevention of CVD and bio-behavioral correlates of CVD in older adults, Cardiac Rehab.

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Meet the Leadership Council

Maureen B. Julien, MSN, CPNP, AACC
Member, Geriatric Cardiology Section Leadership Council

Ashok Krishnaswami, MBBS, FACC
Member, Geriatric Cardiology Section Leadership Council

Social media: @cardskrish

Radmila Lyubarova, MD, FACC
Member, Geriatric Cardiology Section Leadership Council

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Meet the Leadership Council

John P. Mulrow, MD, FACC
Member, Geriatric Cardiology Section Leadership Council

Social media: @MulrowJohn

Michael W. Rich, MD, FACC
Member, Geriatric Cardiology Section Leadership Council

Eiran Gorodeski, MD, MPH, FACC
Member, Geriatric Cardiology Section Leadership Council

Social media: @EiranGorodeski

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Join Us!

The Geriatric Cardiology Member Section is only able to accomplish its mission through support from members.

Visit ACC.org Member Sections page today or email mdisch@acc.org to join!

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