Get Up and Go: Impact of Geriatric Assessment-Driven Interventions

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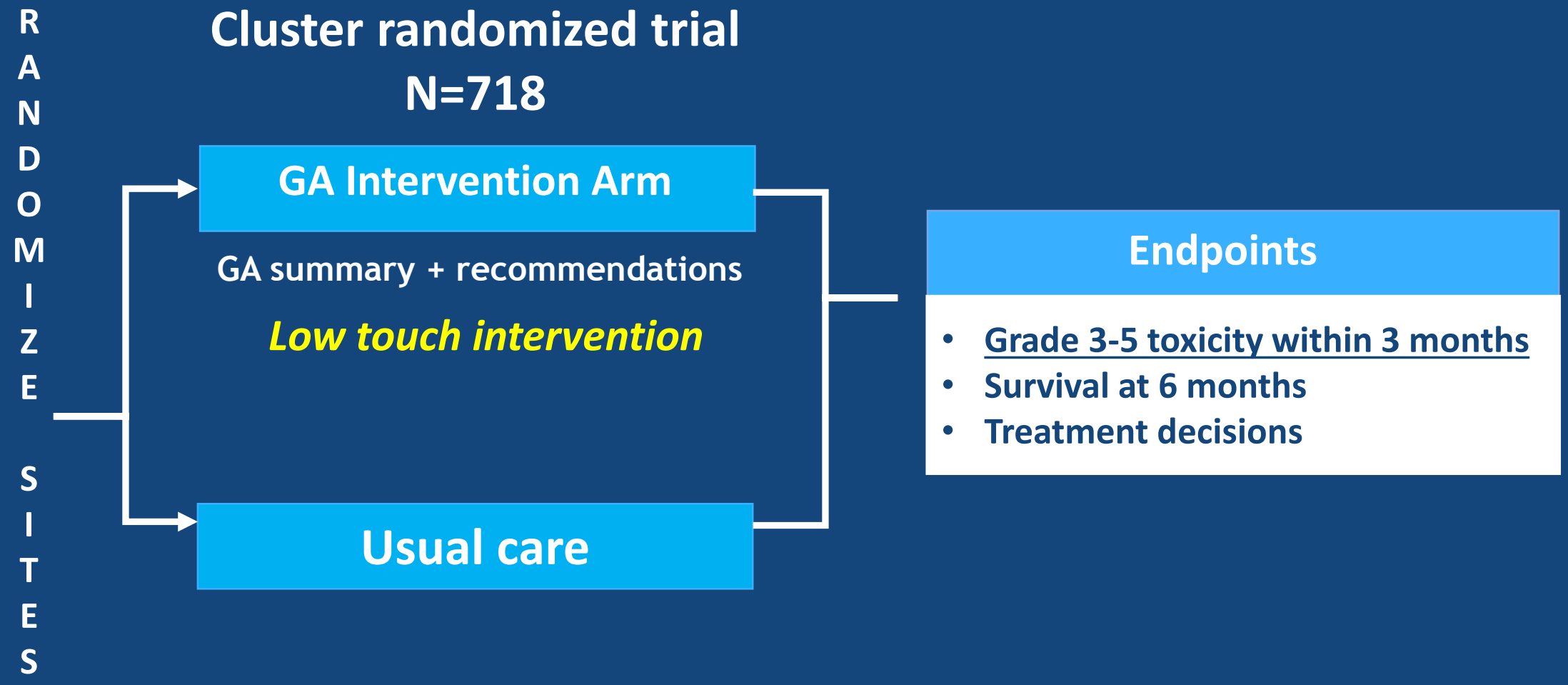
Now we see eagerly awaited results of those next steps:

Abstract 12009 (302115): A geriatric assessment (GA) intervention to reduce treatment toxicity in older patients with advanced cancer: A University of Rochester Cancer Center NCI community oncology research program cluster randomized clinical trial (CRCT). Dr. Supriya Mohile



Who was included in this trial?

Age 70 and older (mean 77yrs)

Advanced stage

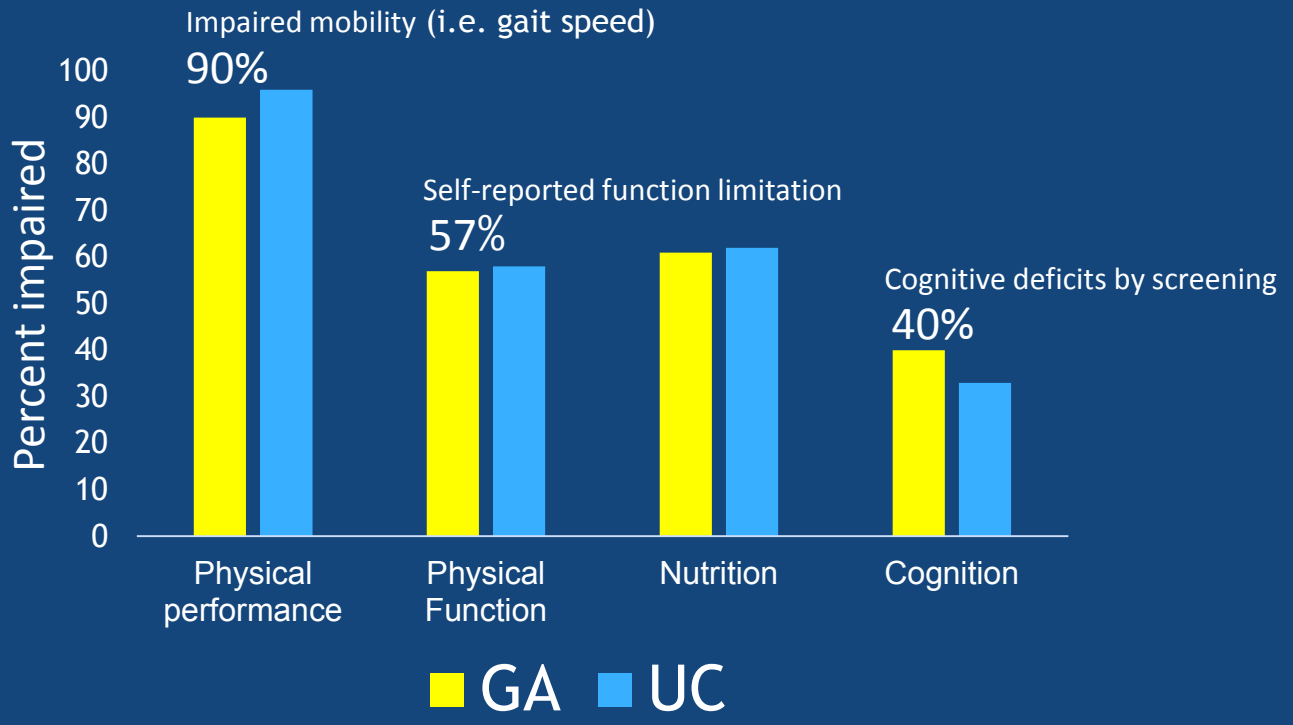
From community sites across US

Who was not included?

adjuvant and fit patients

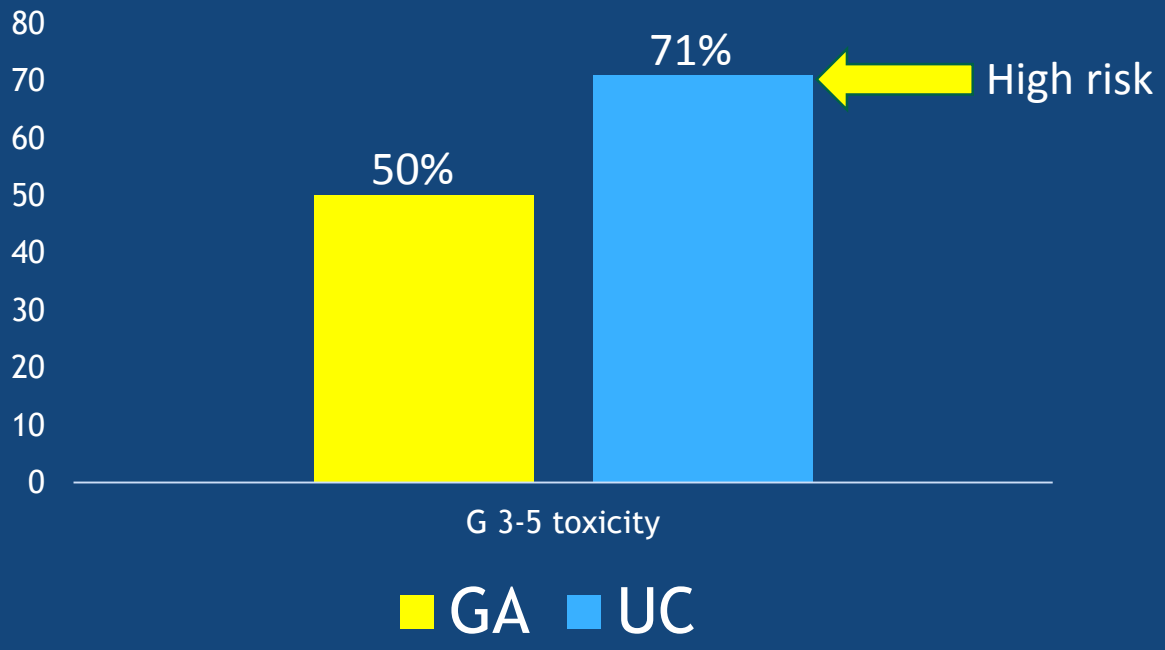
They were vulnerable

at least 1 GA impairment to be eligible



Key findings are clinically meaningful

GA intervention decreased toxicity



ARR= 21% **NNT= 4.8**

For every 5 subjects intervened upon 1 incident toxicity was avoided

Secondary outcomes

- Reduced dose intensity at cycle 1:

  GA arm: 49% vs. UC arm 35%

- Similar 6 month overall survival

  GA arm: 71% vs. UC arm 74%

What is the key ingredient?

YES

Awareness of vulnerability?

Guided interventions effective?

MAYBE?

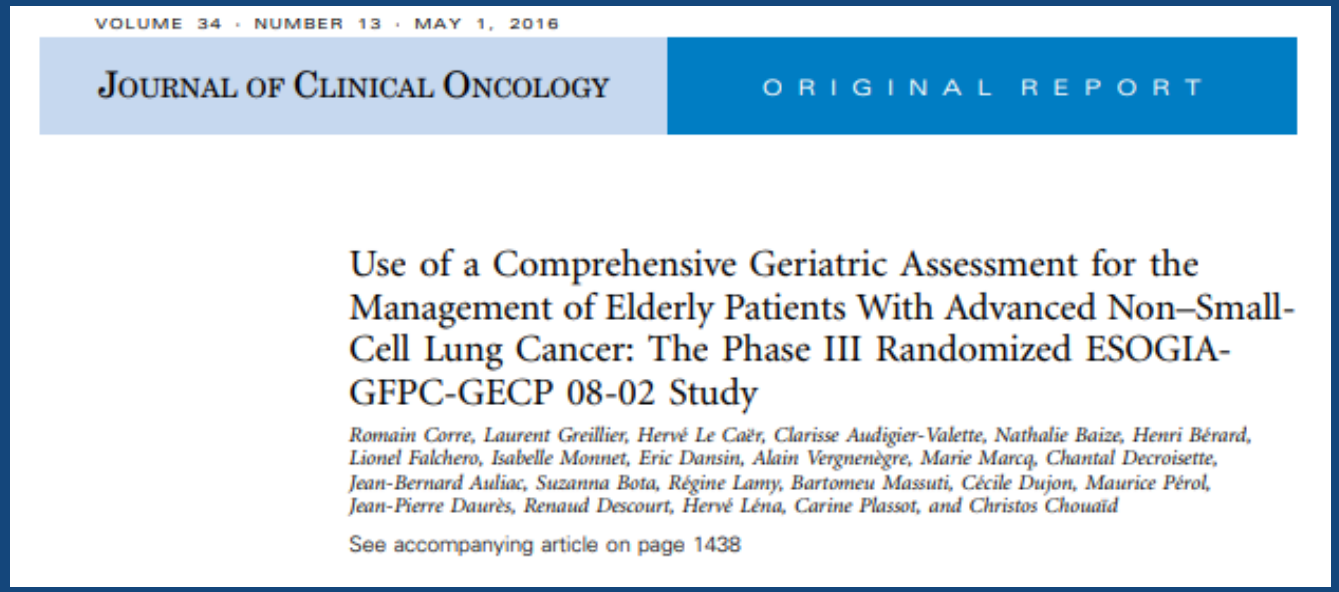
OR BOTH?

Geriatric assessment knowledge changes treatment

After geriatric evaluation a median of 28% (range 8-54%) of treatment plans changed-most to less intensive options

GA-guided treatment allocation can decrease toxicity

Randomized trial advanced lung cancer



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ORIGINAL REPORT

Use of a Comprehensive Geriatric Assessment for the Management of Elderly Patients With Advanced Non–Small-Cell Lung Cancer: The Phase III Randomized ESOGIA-GFPC-GECP 08-02 Study

Romain Corre, Laurent Greillier, Hervé Le Caër, Clarisse Audigier-Valette, Nathalie Baize, Henri Bérard, Lionel Falchero, Isabelle Monnet, Eric Dansin, Alain Vergnenègre, Marie Marcq, Chantal Decroisette, Jean-Bernard Auliac, Suzanna Bota, Régine Lamy, Bartomeu Massuti, Cécile Dujon, Maurice Pérol, Jean-Pierre Daurès, Renaud Descourt, Hervé Léna, Carine Plassot, and Christos Chouaïd

See accompanying article on page 1438

Different design: GA-guided treatment intensity vs. usual care

Similar findings: Less toxicity, fewer treatment failures, no difference in survival

Key ingredient: Right treatment to the right patient?

Corre et al. JCO 2016

Gajra et. al. JCO 2016 editorial

What do we know about implementation of GA recommendations?

ELSEVIER

Annals of Oncology

Volume 29, Issue 9, September 2018, Pages 1987-1994

Original articles

Oncology practice

Adherence to geriatric assessment-based recommendations in older patients with cancer: a multicenter prospective cohort study in Belgium

C. Kenis [1, †], L. Decoster [2, †], J. Flamaing [3, 4], P.R. Debruyne [5, 6], I. De Groof [7], C. Focan [8], F. Cornélis [9], V. Verschaeve [10], C. Bachmann [11], D. Bron [12], S. Luce [13], G. Debugne [14], H. Van den Bulck [15], J.-C. Goeminne [16], D. Schrijvers [17], K. Geboers [18], B. Petit [19], C. Langenaeken [20] ... H. Wildiers [29, 30]

- Multi-center study Belgium
- Age ≥ 70 years
- 5838 underwent GA
- Most frequent GA referrals were: Dietician 43%, social worker 26%, geriatrician 23%
- Adherence: Dietician 60%, geriatrician 54%, social worker 48%

Intervention implementation data will be key to replicating effect

Abstract 12010 (300491): Geriatric assessment-driven intervention (GAIN) on chemotherapy toxicity in older adults with cancer: A randomized controlled trial. Dr. Daneng Li

N=620 at City of Hope

Age 65+

RANDOMIZE

2 → **GA Intervention Arm**

Multi-disciplinary team led/ navigated

High touch intervention

1 → **Usual care**

Received GA information without recommendations

Endpoints

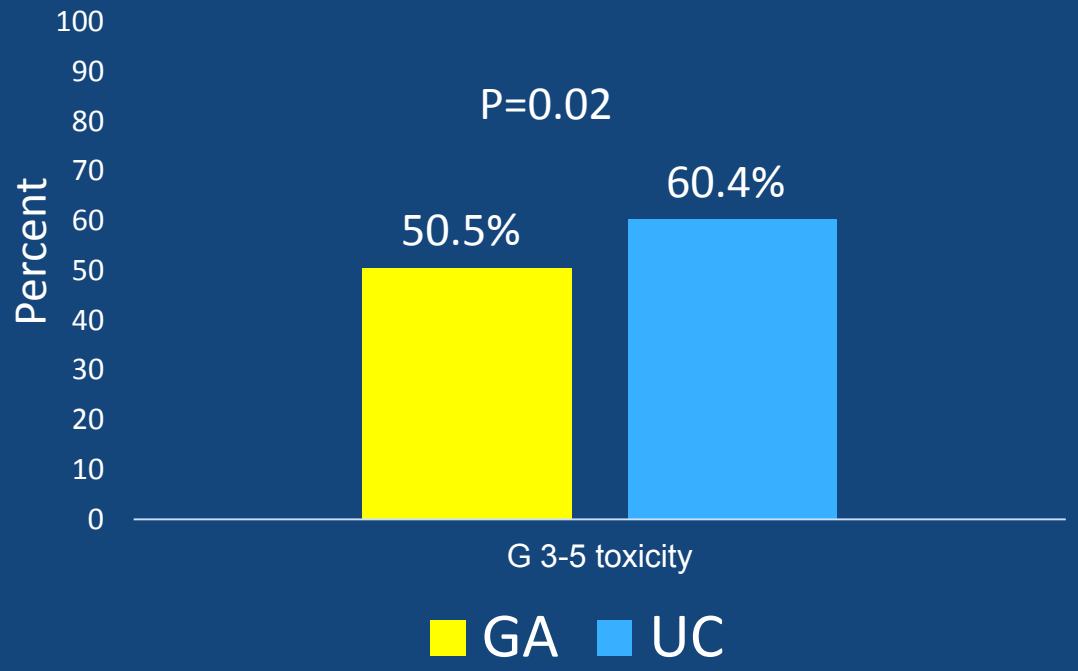
- Grade 3-5 toxicity within 3 months
- Advanced directive completion
- Health care utilization

How does this study population compare?

- On average 5 years younger
- Included all stages (although majority advanced stage)
- Did not require GA impairment for eligibility (although >50% had self-reported functional limitation)
- Enrolled from an academic site

Key results are meaningful: Effect of GA intervention

Chemotherapy-related toxicity reduced



Secondary outcomes

- Increased advanced directive completion:
  GA arm: 70% vs. UC arm 59%
- No difference in health care utilization

ED visits, hospitalizations or length of stay

Answers and questions: What caused the effect?

Answers:

- Effect on toxicity is consistent
- Providing GA summary alone is less effective than MDT team/navigation to decrease toxicity

Questions:

- Did the GA intervention lead to more dose reduction?
- What interventions were recommended?
- What interventions were implemented?
- Is a multi-disciplinary team necessary for the effect?
- Was there a “training” effect over time for providers?

More answers are coming:

Table 3. Randomized Controlled Trials of Geriatric Assessment Under Way

First Author and Location	Design	Population	Intervention Delivery	Management Strategy	Outcomes
Hurria, City of Hope	2:1 patient randomization (n = 600)	Age 65+ with any stage solid tumor Malignancies starting a new chemotherapy regimen (any line)	Study nurse practitioner in collaboration with the primary oncologist and clinic nurse	Established protocol for referral to the multidisciplinary team based on multidisciplinary team input and triggers based on geriatric assessment results	Four primary end points: chemotherapy toxicity (grade 3+), rate of hospitalization, change in functional status, change in psychosocial status
Soubeyran, 28 regional coordination units for geriatric oncology (mix of sites)	Patient randomization (n = 1,200)	Age 70+ with most solid tumor malignancies candidate for first-/second- line medical treatment	Geriatrician with nurse follow-up	Established protocol based on expert input	Coprimary end point of overall survival and dimensions of quality of life, response, progression-free survival, other quality of life, chemotherapy toxicity, health care utilization
Puts, multicenter study of centers in Canada	Patient randomization (n = 350)	Aged 70+ with most solid tumor malignancies starting first-/second-line chemotherapy	Geriatric oncology with nurse follow-up	Established protocol based on Delphi consensus and guidelines	Quality of life cost-effectiveness, function, chemotherapy toxicity, satisfaction, cancer treatment changes, survival
Mohile, community oncology practices affiliated with the University of Rochester NCORP Research Base	Two studies: cluster randomization by oncology practice (n = 700) and (n = 528)	Aged 70+ with advanced solid tumor malignancies	Study 1: chemotherapy toxicity (grade 3+), survival, function Study 2: communication, satisfaction, patient and caregiver quality of life, health care utilization	Established protocol based on Delphi consensus panel and guidelines	Chemotherapy toxicity (grade 3+), survival, function Communication, satisfaction, patient, and caregiver quality of life, health care utilization

Abbreviation: NCORP, National Cancer Institute Community Oncology Research Program.

Primary outcome

Primary outcome

Supriya G. Mohile; et al. *Journal of Clinical Oncology* 2018 362326-2347.

Practice Changing Take Home Points

- **Geriatric assessment-guided intervention decreases treatment toxicity for older adults with advanced stage cancer**
- **Practice changing options (resource dependent):**
  1. Administer GA[1] and utilize published intervention recommendations[2] for adults 70 and over with advanced cancer (any practice)
  2. Administer GA and guide management with MDT (resourced practices)

Next Steps: Implementation, isolating effect of GA guided supportive care, testing GA guided care for older adults treated with curative intent, advocacy for resources to deliver optimal personalized care

1. Mohile et al. J Clin Oncol 2018 36: 2326-2347
2. Mohile et al. JNCCN 13: 1120-1130, 2015

Congratulations to the research teams

These results will improve care for older adults with cancer