Relevant publications 2021/2022 for ambulatory care

Prof. Dagmar M. HALLER-HESTER

Head of Research, IuMFE, UNIGe / Médecin adjoint, SMPR, HUG

& Family doctor in private practice

Thursday 22nd September

SSMIG-SGAIM Conference DAVOS

Meet Mary

- 74 years old
- Retired interpreter, maried to a scientist
- Hypertension (treated by perindopril 5mg/d)
- Has a BMI= 30.5 kg/m^2 and mild hyperinsulinemia
- Has knee ostheoarthritis, treated by occasional painkillers
- Has been taking fluoxetine for past 10 years

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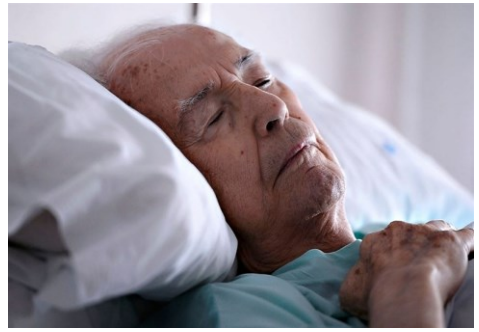
Meet Vincent

- 24 years old
- Mary's grandson
- Medical student
- Likes to advise his grandmother for her medical treatment and follow-up

Mary's list of questions in 2022

1. My grandson says I should sleep more: is this true?
2. The pain in my right knee is increasing: I heard a « visco-thing » could help.
3. Can I receive the miracle new pill for my hypertension? I want to control my blood pressure better because I have pre-diabetes
4. How about stopping the Fluoxetine treatment?

Should Mary sleep more?



nature COMMUNICATIONS

ARTICLE

https://doi.org/10.1038/s41467-021-22354-2 OPEN

Check for updates

Association of sleep duration in middle and old age with incidence of dementia

Séverine Sabia[1,2✉], Aurore Fayosse[1], Julien Dumurgier[1,3], Vincent T. van Hees[4], Claire Paquet[3], Andrew Sommerlad[5,6], Mika Kivimäki[2,7], Aline Dugravot[1] & Archana Singh-Manoux[1,2]

[1] Université de Paris, Inserm U1153, Epidemiology of Ageing and Neurodegenerative diseases, Paris, France. [2] Department of Epidemiology and Public Health, University College London, London, UK. [3] Université de Paris, Inserm U1144, Cognitive Neurology Center, GHU APHP Nord Lariboisière – Fernand Widal Hospital, Paris, France. [4] Accelting, Andorrastraat 13, Almere, The Netherlands. [5] Division of Psychiatry, University College London, London, UK. [6] Camden and Islington NHS Foundation Trust, London, UK. [7] Clinicum, University of Helsinki, Helsinki, Finland. ✉email: severine.sabia@inserm.fr

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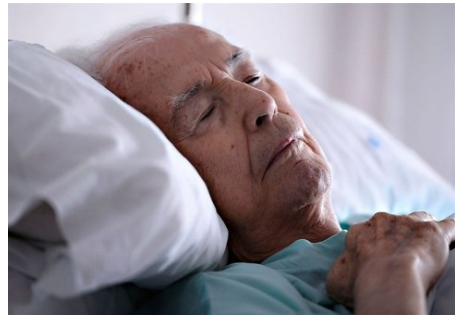
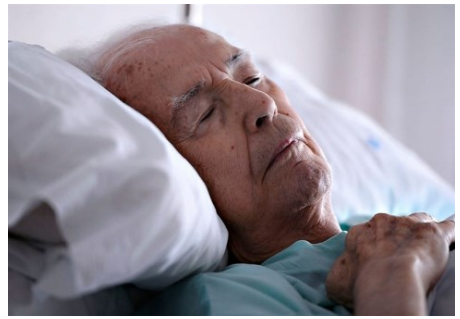
Should Mary sleep more?



- Whitehall II cohort study
- Approx 10’ 000 Civil Servants in London
- Age @ inclusion 35-55 years (1985-86)
- 3414 female / 6900 male
- Analysis: Cox regression with age as the timescale to model the associations between length of sleep and incident dementia

Should Mary sleep more?



- **Sleep measures**:
  « How many hours do you sleep on a weeknight»?
  Response options: ≤5 hrs, 6, 7, 8, 9 or more hrs
  Pooled-> ≤6hrs= short
  7hrs= normal
  ≥8hrs= long
  + actimeter substudy
- **Dementia outcome**:
  linkage to three national registers, ICD-10 codes

Association between sleep duration and incidence of dementia

Table 2 Association between sleep duration at 50, 60, and 70 years and incidence of dementia.

	N cases/*N* total	Incidence rate per 1000 persons-years	Model 1: adjusted for sociodemographic variables[a]		Model 1 + behavioural factors[b]		Model 1 + health-related factors[c]		Fully adjusted model	
			HR (95%CI)	*P* value[d]	HR (95%CI)	*P* value[d]	HR (95%CI)	*P* value[d]	HR (95%CI)	*P* value[d]
Sleep duration at age 50[e]	521/7959									
Short: ≤6 h	211/3149	2.8 (2.4-3.2)	1.28 (1.06-1.55)	0.01	1.27 (1.05-1.54)	0.01	1.22 (1.01-1.48)	0.04	1.22 (1.01-1.48)	0.04
Normal: 7 h	219/3624	2.4 (2.1-2.7)	1 (ref.)		1 (ref.)		1 (ref.)		1 (ref.)	
Long: ≥8 h	91/1186	3.0 (2.4-3.7)	1.25 (0.98-1.59)	0.08	1.25 (0.98-1.60)	0.07	1.24 (0.97-1.59)	0.09	1.25 (0.98-1.60)	0.07
Sleep duration at age 60[e]	409/7164									
Short: ≤6 h	192/2759	4.7 (4.0-5.4)	1.48 (1.19-1.84)	<0.001	1.46 (1.17-1.82)	0.001	1.38 (1.11-1.73)	0.004	1.37 (1.10-1.72)	0.005
Normal: 7 h	142/2988	3.2 (2.7-3.7)	1 (ref.)		1 (ref.)		1 (ref.)		1 (ref.)	
Long: ≥8 h	75/1417	3.6 (2.8-4.4)	1.15 (0.87-1.52)	0.33	1.17 (0.88-1.55)	0.28	1.13 (0.85-1.50)	0.39	1.15 (0.87-1.52)	0.34
Sleep duration at age 70[e]	392/6516									
Short: ≤6 h	171/2429	9.3 (7.9-10.7)	1.33 (1.06-1.68)	0.004	1.29 (1.03-1.63)	0.005	1.26 (1.00-1.60)	0.04	1.24 (0.98-1.57)	0.10
Normal: 7 h	131/2578	6.8 (5.6-7.9)	1 (ref.)		1 (ref.)		1 (ref.)		1 (ref.)	
Long: ≥8 h	90/1509	8.1 (6.4-9.7)	1.22 (0.94-1.60)	0.39	1.13 (0.91-1.55)	0.34	1.18 (0.90-1.55)	0.22	1.15 (0.88-1.51)	0.60

CI confidence intervals, *HR* hazard ratio, *SD* standard deviation.
[a]HR estimated from a Cox regression adjusted for age (timescale), sex, ethnicity, education, and marital status.
[b]Additionally adjusted for alcohol consumption, physical activity, smoking status, and fruit and vegetable consumption.
[c]Additionally adjusted for BMI, hypertension, diabetes, cardiovascular disease, GHQ depression, and CNS medications.
[d]Two-sided *P* value for HR in comparison with the reference (ref.) category, without adjustment for multiple comparisons.
[e]Follow-up: at age 50, mean = 24.6 years, SD = 7.0 years, range = 0.18-33.6 years; at age 60, mean = 14.8 years, SD = 5.9 years, range = 0.11-33.6 years; at age 70, mean = 7.5 years, SD = 4.7 years, range = 0.04-21.8 years.

Association between sleep duration and incidence of dementia-fully adjusted model

	HR (95% CI)	P value
Sleep duration at age 50		
short ≤6h	1.22 (1.01-1.48)	0.04
normal 7h	1 (ref.)	
long ≥8 h	1.25 (0.98-1.60)	0.07
Sleep duration at age 60		
short ≤6h	1.37 (1.10-1.72)	0.005
normal 7h	1 (ref.)	
long ≥8 h	1.15 (0.87-1.52)	0.34
Sleep duration at age 70		
short ≤6h	1.24 (0.98-1.57)	0.10
normal 7h	1 (ref.)	
long ≥8 h	1.15 (0.88-1.51)	0.60

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	HR (95% CI)	P value
Sleep duration at age 50		
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Sleep duration at age 60		
short ≤6h	**1.37 (1.10-1.72)**	**0.005**
normal 7h	1 (ref.)	
long ≥8 h	1.15 (0.87-1.52)	0.34
Sleep duration at age 70		
short ≤6h	1.24 (0.98-1.57)	0.10
normal 7h	1 (ref.)	
long ≥8 h	1.15 (0.88-1.51)	0.60

Association between sleep trajectories and incidence of dementia

Table 4 Association of of trajectories of sleep duration (using data on sleep duration at 50, 60, and 70 years, N cases/N total = 426/6875) with incidence of dementia.

Trajectories of sleep duration between age 50 and 70[a]	*N* cases/ *N* total	Incidence rate per 1000 persons-years	Model 1: adjusted for sociodemographic variables[b]		Model 1 + behavioural factors[c]		Model 1 + health-related factors[d]		Fully adjusted model	
			HR (95%CI)	*P* value[e]	HR (95%CI)	*P* value[e]	HR (95%CI)	*P* value[e]	HR (95%CI)	*P* value[e]
Persistent short	103/1358	10.5 (8.5–12.5)	1.40 (1.08–1.81)	0.01	1.35 (1.05–1.75)	0.02	1.32 (1.02–1.72)	0.03	1.30 (1.00–1.69)	0.048
Persistent normal	141/2520	7.3 (6.1–8.5)	1 (ref.)		1 (ref.)		1 (ref.)		1 (ref.)	
Persistent long	35/461	9.9 (6.6–13.1)	1.32 (0.91–1.91)	0.15	1.27 (0.88–1.85)	0.20	1.32 (0.91–1.91)	0.15	1.28 (0.88–1.85)	0.20
Change from short to normal	61/1086	8.2 (6.1–10.2)	1.23 (0.91–1.66)	0.18	1.21 (0.90–1.64)	0.21	1.21 (0.90–1.64)	0.21	1.20 (0.89–1.63)	0.23
Change from normal to long	47/946	7.1 (5.0–9.1)	1.04 (0.75–1.45)	0.81	1.03 (0.74–1.44)	0.85	1.03 (0.74–1.44)	0.86	1.02 (0.73–1.42)	0.90
Change from normal to short	39/504	9.6 (6.6–12.6)	1.21 (0.84–1.73)	0.30	1.17 (0.82–1.68)	0.38	1.15 (0.80–1.65)	0.44	1.13 (0.79–1.62)	0.50

CI confidence intervals, *HR* hazard ratio, *SD* standard deviation.
[a]Follow-up: mean = 7.4 years, SD = 4.7 years, range = 0.1–21.8 years.
[b]HR estimated from a Cox regression adjusted for age (timescale), sex, ethnicity, education, and marital status.
[c]Additionally adjusted for alcohol consumption, physical activity, smoking status, and fruit and vegetable consumption.
[d]Additionally adjusted for BMI, hypertension, diabetes, cardiovascular disease, GHQ depression, and CNS medications.
[e]Two-sided *P* value for HR in comparison with the reference (ref.) category, without adjustment for multiple comparisons.

Association between sleep trajectories and incidence of dementia-fully adjusted models

Trajectories	HR (95% CI)	P-value
Persistent short	1.30 (1.00-1.69)	0.048
Persistent normal	1 (ref.)	
Persistent long	1.28 (0.88-1.85)	0.20
Change from short to normal	1.20 (0.89-1.63)	0.23
Change from normal to long	1.02 (0.73-1.42)	0.90
Change from normal to short	1.13 (0.79-1.62)	0.50

Association between sleep trajectories and incidence of dementia-fully adjusted models

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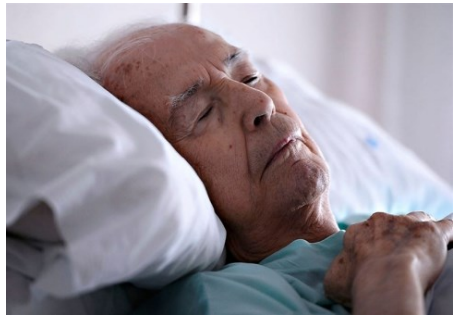
Should Mary sleep more?



- This study does not provide evidence that can be applied to changes in sleep duration at her age: **sleep ≤6hrs could be associated with pre-clinical** dementia
- Strength of this study over others:
  - controls for **mental health**
  - long duration **reduces likelihood of reverse causation**

Sabia S, Fayosse A, Dumurgier J, van Hees VT, Paquet C, Sommerlad A, Kivimäki M, Dugravot A, Singh-Manoux A. **Association of sleep duration in middle and old age with incidence of dementia**. *Nat Commun. 2021 Apr 20;12(1):2289*

Mary's list of questions in 2022

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4. How about stopping the Fluoxetine treatment?

Relieving pain from knee osteoarthritis

RESEARCH

Viscosupplementation for knee osteoarthritis: systematic review and meta-analysis

Tiago V Pereira,[1,2] Peter Jüni,[1,3,4] Pakeezah Saadat,[1,3] Dan Xing,[5] Liang Yao,[6] Pavlos Bobos,[1,7] Arnav Agarwal,[3,6] Cesar A Hincapié,[8,9] Bruno R da Costa[1,3,10]

For numbered affiliations see end of the article

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Additional material is published online only. To view please visit the journal online.

Cite this as: *BMJ* 2022;378:e069722 http://dx.doi.org/10.1136/bmj-2022-069722

Accepted: 23 May 2022

ABSTRACT

OBJECTIVE

To evaluate the effectiveness and safety of viscosupplementation for pain and function in patients with knee osteoarthritis.

DESIGN

Systematic review and meta-analysis of randomised trials.

DATA SOURCES

Searches were conducted of Medline, Embase, and the Cochrane Central Register of Controlled Trials

sequential analysis under a random effects model were also performed.

RESULTS

169 trials provided data on 21 163 randomised participants. Evidence of small study effects and publication biases was observed for pain and function (Egger's tests with P<0.001 and asymmetric funnel plots). Twenty four large, placebo controlled trials (8997 randomised participants) included in the main analysis of pain indicated that viscosupplementation was associated with a small reduction in pain intensity

BMJ: first published as 10.1136/bmj-2022-069722 on 6 July 2022.

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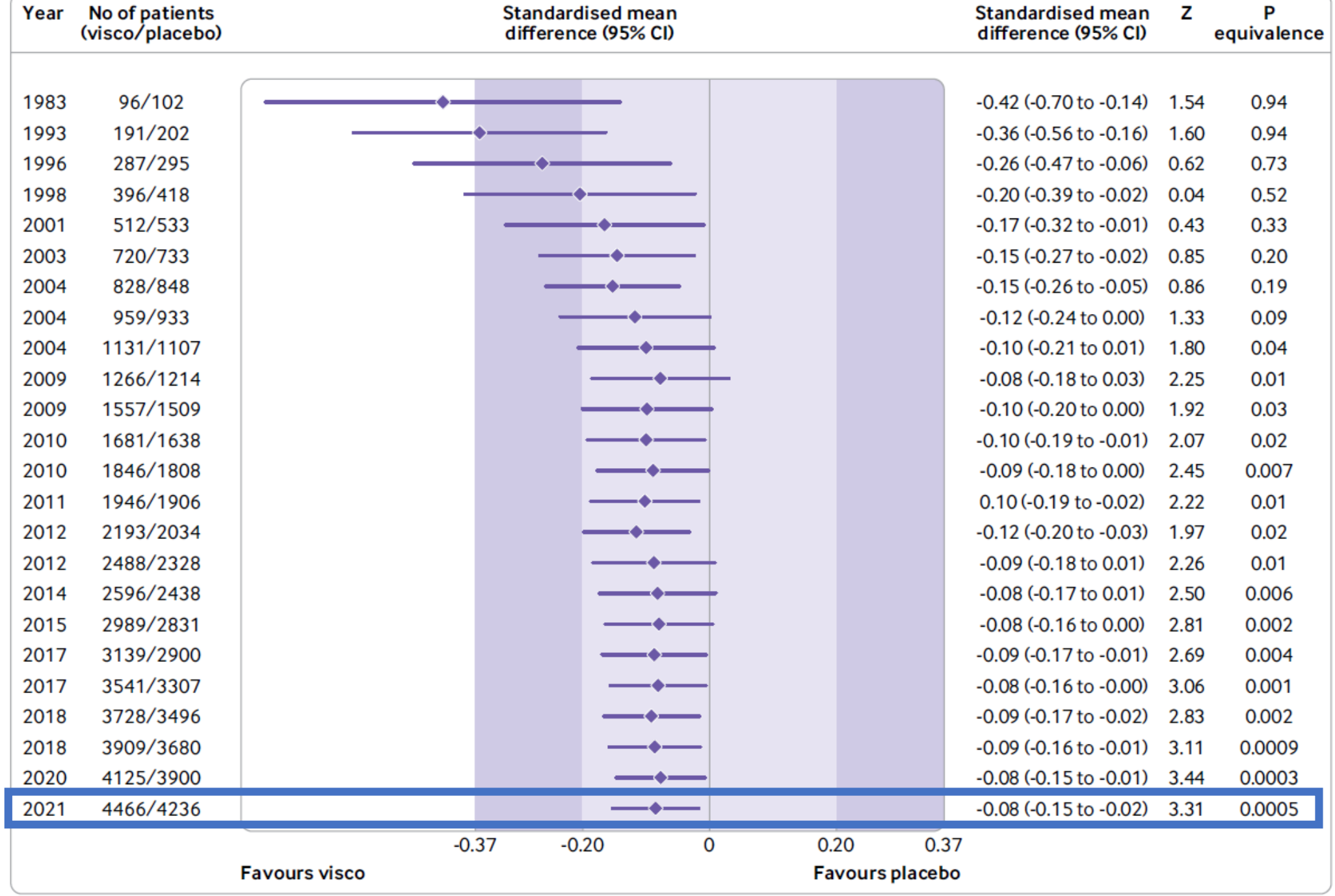
Relieving pain from knee osteoarthritis

- Systematic review, 169 studies spanning 50 years of RCTs
- Analysis: RCT, placebo controlled, **> 100 participants**-> N=24 trials
- Outcomes, analysed as **standard mean difference**
  - primary outcome= pain intensity
  - secondary outcome= function
- Adverse events analysed as relative risks

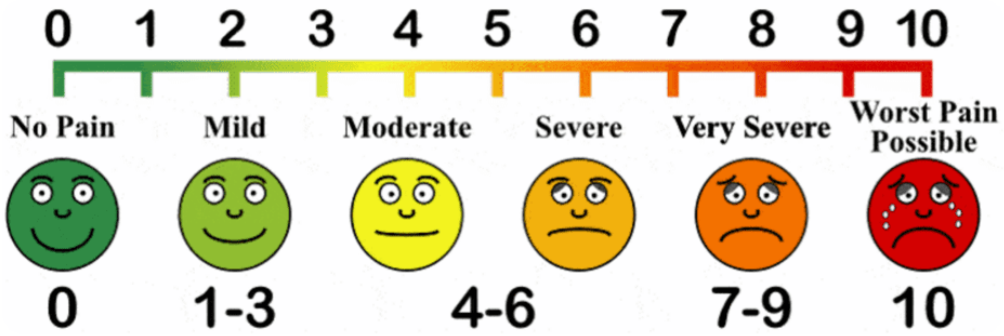


ig 3 | Cumulative pooled analysis for knee pain based on large, placebo controlled trials (n=24 trials, 8997 patients randomised). The shaded

Relieving pain from knee osteoarthritis

- Benefits of viscosupplementation pain in knee OA pain= clinically minimal->mean reduction =>

only 2mm/ 100mm VAS



- Functional benefits= similar
- Adverse events: **RR=1,49**, 95%CI 1,12 to 1.98
  (NB: AE not necessarily clinically related to viscosupplmentation)

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4. How about stopping the Fluoxetine treatment?

Relieving pain from knee osteoarthritis

ORIGINAL RESEARCH

Annals of Internal Medicine

The Effect of Flat Flexible Versus Stable Supportive Shoes on Knee Osteoarthritis Symptoms

A Randomized Trial

Kade L. Paterson, BAppSci(Hons), BPod, PhD; Kim L. Bennell, BAppSci(Physio), PhD;
Penny K. Campbell, BAppSci(FoodSci&Nutr); Ben R. Metcalf, BSci(Hons); Tim V. Wrigley, BSci(Hons), MSc;
Jessica Kasza, BSci(Hons), PhD; and Rana S. Hinman, BPhysio(Hons), PhD

Ann Intern Med. 2021;174:462-471. doi:10.7326/M20-6321

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RCT in Australia-164 patients, 50 + years
Moderate to severe symptomatic, radiographic medial knee osteoarthrosis

- Recruited through web advertissements, and research volunteers database

Hypothesis: flat flexible > stable supportive
Suggested mechanism: reductions in medial knee loading

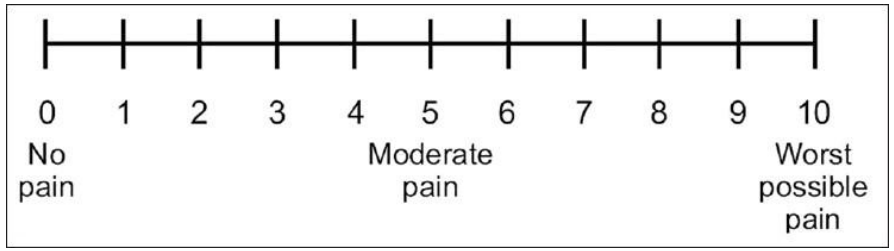
Flat flexible shoes

Stable supportive shoes

Flat flexible versus stable supportive shoes

- Outcomes:

Pain: change in self-reported measure of pain at 6 months.



Clinically significant difference set @ **1.8**

- **Function**: WOMAC questionnaire function subscale->0 to 68

Clinically significant difference set @ **6**

WOMAC= Western Ontario and McMaster Universities Osteoarthritis Index

Flat flexible versus stable supportive shoes

Table 3. Mean (SD) Scores on Continuous Outcome Measures Across Time, by Group

Outcome Measure	Baseline		6 mo	
	Flat Flexible Shoe Group (*n* = 82)	Stable Supportive Shoe Group (*n* = 82)	Flat Flexible Shoe Group (*n* = 81)*	Stable Supportive Shoe Group (*n* = 80)*
Primary outcomes				
Overall average knee pain while walking (NRS)	6.3 (1.3)	6.1 (1.4)	5.2 (2.3)	4.0 (2.1)
Physical function (WOMAC)	29.9 (10.1)	28.9 (10.5)	25.3 (12.7)	22.4 (12.3)

Flat flexible versus stable supportive shoes: change within groups and difference in change between groups

Table 4. Change Within Groups and Difference in Change Between Groups (Adjusted for Baseline Value of Outcome), for Continuous Outcomes

Outcome Measure	Mean Change Within Groups, Baseline – Month 6 (SD)		Mean Difference in Change Between Groups, Baseline to Month 6 (95% CI)
	Flat Flexible Shoe Group (*n* = 81)*	Stable Supportive Shoe Group (*n* = 80)*	
Primary outcomes			
Overall average knee pain (NRS)†	1.1 (2.3)	2.1 (2.4)	1.1 (0.5 to 1.8)‡
Physical function (WOMAC)†	4.7 (10.7)	6.7 (11.0)	2.3 (−0.9 to 5.5)§

‡ p=0.001
§ p=0.35

Conclusion: stable supportive shoes resulted in greater improvements in walking knee pain, but not function, than flat flexible shoes overs 6 months

Flat flexible shoes

<

Stable supportive shoes

Is this new?

- RCT-patients & assessors blinded (« testing different footwear »),
- Patients involved in choice of shoes: high adherence
- Simple criteria to define shoes-> increase generalisability

Supplement Table 1. Criteria for classification of flat flexible and stable supportive shoes from Paterson et al.[1]

	Flat flexible shoes	Stable supportive shoes
Heel height/thickness	<15 mm	>30 mm
Shoe pitch	<10 mm	> 10 mm
Arch support/motion control	Absent	Present
Sole flexibility	"Minimal" rigidity (Footwear Assessment Tool[2])	"Rigid" (Footwear Assessment Tool[2])
Weight*	≤200 grams	>300 grams

Measurements are based on a size 9 US Men's and size 9 US Women's sized shoe.
*A tolerance of +/- 10% was used for shoe weight.

Mary's list of questions in 2022

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A miracle new pill for hypertension

Initial treatment with a single pill containing quadruple combination of quarter doses of blood pressure medicines versus standard dose monotherapy in patients with hypertension (QUARTET): a phase 3, randomised, double-blind, active-controlled trial

Clara K Chow, Emily R Atkins, Graham S Hillis, Mark R Nelson, Christopher M Reid, Markus P Schlaich, Peter Hay, Kris Rogers, Laurent Billot, Michael Burke, John Chalmers, Bruce Neal, Anushka Patel, Tim Usherwood, Ruth Webster, Anthony Rodgers, on behalf of the QUARTET Investigators

Summary

Background Treatment inertia is a recognised barrier to blood pressure control, and simpler, more effective

Lancet 2021; 398: 1043–52

A miracle new pill for hypertension

« Dose-response studies of individual agents indicate most benefits are achieved and most side-effects avoided at low doses »

↓

Hypothesis

↓

« A hypertension management strategy starting with a single pill containing ultra-low-dose quadruple combination therapy would be more effective than a strategy of starting with monotherapy »

A miracle new pill for hypertension

- Ambulatory patients (primary care or hospital outpatient clinics)
- RCT
  - 291= standard monotherapy (irbesartan 150mg)
  - 300= quadpill = irbesartan 37.5mg
    amlodipine 1.25mg
    indapamide 0.625mg
    bisoprolol 2.5 mg

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Quartet: participants

	Intervention (n=300)	Control (n=291)
Age, years	58 (12)	59 (11)
Sex		
Female	122 (41%)	113 (39%)
Male	178 (59%)	178 (61%)
Health-care concession card holder	65 (22%)	72 (25%)
Race or ethnicity		
White	249 (83%)	234 (80%)
Asian	33 (11%)	37 (13%)
Other*	18 (6%)	20 (7%)
Baseline blood pressure treatment		
Not treated†	171 (57%)	147 (51%)
On monotherapy	129 (43%)	144 (49%)
Baseline blood pressure, mm Hg		
Unattended systolic	142 (13)	140 (13)
Unattended diastolic	86 (10)	83 (10)
Office systolic	153 (16)	152 (15)
Office diastolic	89 (10)	88 (11)
24 h ABPM, systolic	144 (11)	143 (11)
24 h ABPM, diastolic	84 (9)	84 (9)
Baseline heart rate, beats per min	71 (11)	71 (11)
Body-mass index, kg/m^2	31 (6)	30 (6)
Ever smoked	115 (38%)	110 (38%)
Current smoker	23 (8%)	25 (9%)
Former smoker	92 (31%)	85 (29%)
Alcohol once or more per week	202 (67%)	174 (60%)
Diabetes	21 (7%)	24 (8%)

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Quartet: main results- hypertension control

	Intervention	Control	Absolute rate difference (95% CI)	Relative rate (95% CI)	p value
Blood pressure target achieved (office blood pressure <140/90 mm Hg)					
Week 6	154/201 (77%)	109/208 (52%)	24·2 (15·0–32·8)	1·47 (1·26–1·71)	<0·0001
Week 12	155/205 (76%)	129/211 (61%)	14·5 (5·5–23·1)	1·24 (1·08–1·42)	0·0022
Week 26	149/196 (76%)	128/194 (66%)	10·0 (1·0–18·8)	1·15 (1·01–1·31)	0·0299
Week 52	150/184 (82%)	114/185 (62%)	19·9 (10·7–28·6)	1·32 (1·16–1·50)	<0·0001
Tight blood pressure target achieved (office blood pressure <120/80 mm Hg)					
Week 6	85/201 (42%)	44/208 (21%)	21·1 (12·2–29·7)	1·98 (1·45–2·70)	<0·0001
Week 12	92/205 (45%)	60/211 (28%)	16·4 (7·2–25·3)	1·58 (1·21–2·06)	0·0009
Week 26	83/196 (42%)	47/194 (24%)	18·1 (8·8–27·0)	1·76 (1·30–2·38)	0·0003
Week 52	97/184 (53%)	46/185 (25%)	27·9 (18·0–36·9)	2·07 (1·56–2·75)	<0·0001

Data are n/N (%) unless otherwise specified.

Table 3: Hypertension control at weeks 6, 12, 26, and 52 in the extended cohort

Quartet: strength and limitations

- Blinded comparison against most commonly used regimen
- One year follow-up
- GPs free to add treatments if BP not controlled with study ttt

- Comparison ttt= monotherapy, not to the currently recommended dual combination therapy as in recent guidelines.
- Quadpill not yet commercially available!

Chow CK, Atkins ER, Hillis GS, et al; QUARTET Investigators. Lancet. 2021 Sep 18;398(10305):1043-1052

Mary's list of questions in 2022

1. My grandson says I should sleep more: is this true?
2. The pain in my right knee is increasing: I heard a « visco-thing » could help.
3. Can I receive the miracle new pill for my hypertension? I want to control my blood pressure better **because I have pre-diabetes**
4. How about stopping the Fluoxetine treatment?

Should Mary be worried about her hypertension because she has pre-diabetes?

Blood pressure-lowering treatment for prevention of major cardiovascular diseases in people with and without type 2 diabetes: an individual participant-level data meta-analysis

*Milad Nazarzadeh, Zeinab Bidel, Dexter Canoy, Emma Copland, Derrick A Bennett, Abbas Dehghan, George Davey Smith, Rury R Holman, Mark Woodward, Ajay Gupta, Amanda I Adler, Malgorzata Wamil, Naveed Sattar, William C Cushman, Richard J McManus, Koon Teo, Barry R Davis, John Chalmers, Carl J Pepine, Kazem Rahimi, on behalf of the Blood Pressure Lowering Treatment Trialists' Collaboration**

Summary

Background Controversy exists as to whether the threshold for blood pressure-lowering treatment should differ

Lancet Diabetes Endocrinol 2022

Results / conclusions

Interpretation Although the relative beneficial effects of blood pressure reduction on major cardiovascular events were weaker in participants with type 2 diabetes than in those without, absolute effects were similar. The difference in relative risk reduction was not related to the baseline blood pressure or allocation to different drug classes. Therefore the adoption of differential blood pressure thresholds, intensities of blood pressure lowering, or drug classes used in people with and without type 2 diabetes is not warranted.

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Mary has been taking Fluoxetine for the past 10 years…

The NEW ENGLAND JOURNAL of MEDICINE

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Maintenance or Discontinuation of Antidepressants in Primary Care

Gemma Lewis, Ph.D., Louise Marston, Ph.D., Larisa Duffy, B.Sc., Nick Freemantle, Ph.D., Simon Gilbody, Ph.D., Rachael Hunter, M.Sc., Tony Kendrick, M.D., David Kessler, M.D., Dee Mangin, F.R.N.Z.C.G.P., Michael King, Ph.D., Paul Lanham, B.A., Michael Moore, F.R.C.G.P., Irwin Nazareth, Ph.D., Nicola Wiles, Ph.D., Faye Bacon, B.Sc., Molly Bird, M.Sc., Sally Brabyn, M.Sc., Alison Burns, B.Sc., Caroline S. Clarke, Ph.D., Anna Hunt, M.Sc., Jodi Pervin, B.Sc., and Glyn Lewis, Ph.D.

Maintenance or discontinuation of antidepressants in primary care

- RCT involving nearly 500 patients
- 150 general practices in UK

- ≥ 2 depressive episodes / taking antidepressants for ≥ 2 years
- Mean age 54 years, 73% women, mean age at first episode= 33 years

- RCT
  - 238: maintenance of usual ttt (citalopram, fluoxetine, sertraline, mirtazapine)
  - 240: taper and discontinue with use of matching placebo

UNIVERSITÉ DE GENÈVE
FACULTY OF MEDICINE
University Institute for Primary Care (IuMFE)

Maintenance or discontinuation of antidepressants in primary care

- **Primary Outcome:**

  first relapse within follow-up
  measured @ 6, 12, 26, 39 & 52 weeks
  in a time-to-event analysis

  depression diagnosis based on retrospective CIS-R

CIS-R= Clinical Interview Schedule -Revised

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Maintenance or discontinuation of antidepressants in primary care: results

Table 2. Primary and Secondary Outcomes.*

Outcome	Maintenance Group (N=238)	Discontinuation Group (N=240)	Effect Size or Difference (95% CI)†
Primary outcome			
Relapse of depression — no. (%)	92 (39)	135 (56)	Hazard ratio, 2.06 (1.56 to 2.70)
Secondary outcomes			
Score on Patient Health Questionnaire 9-item version			
12 wk	4.1±3.8	6.3±5.1	2.2 (1.5 to 2.8)
26 wk	4.2±3.7	5.0±4.6	0.7 (0.0 to 1.4)
39 wk	3.8±3.9	4.4±4.2	0.6 (−0.1 to 1.2)
52 wk	3.7±3.7	4.0±4.5	0.4 (−0.3 to 1.1)
Score on Generalized Anxiety Disorder 7-item version			
12 wk	3.1±3.3	5.3±4.6	2.4 (1.8 to 3.0)
26 wk	3.4±3.8	4.1±4.4	0.8 (0.1 to 1.4)
39 wk	2.9±3.5	3.8±4.1	1.0 (0.4 to 1.6)
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Maintenance or discontinuation of antidepressants in primary care: results

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Maintenance or discontinuation of antidepressants in primary care: results

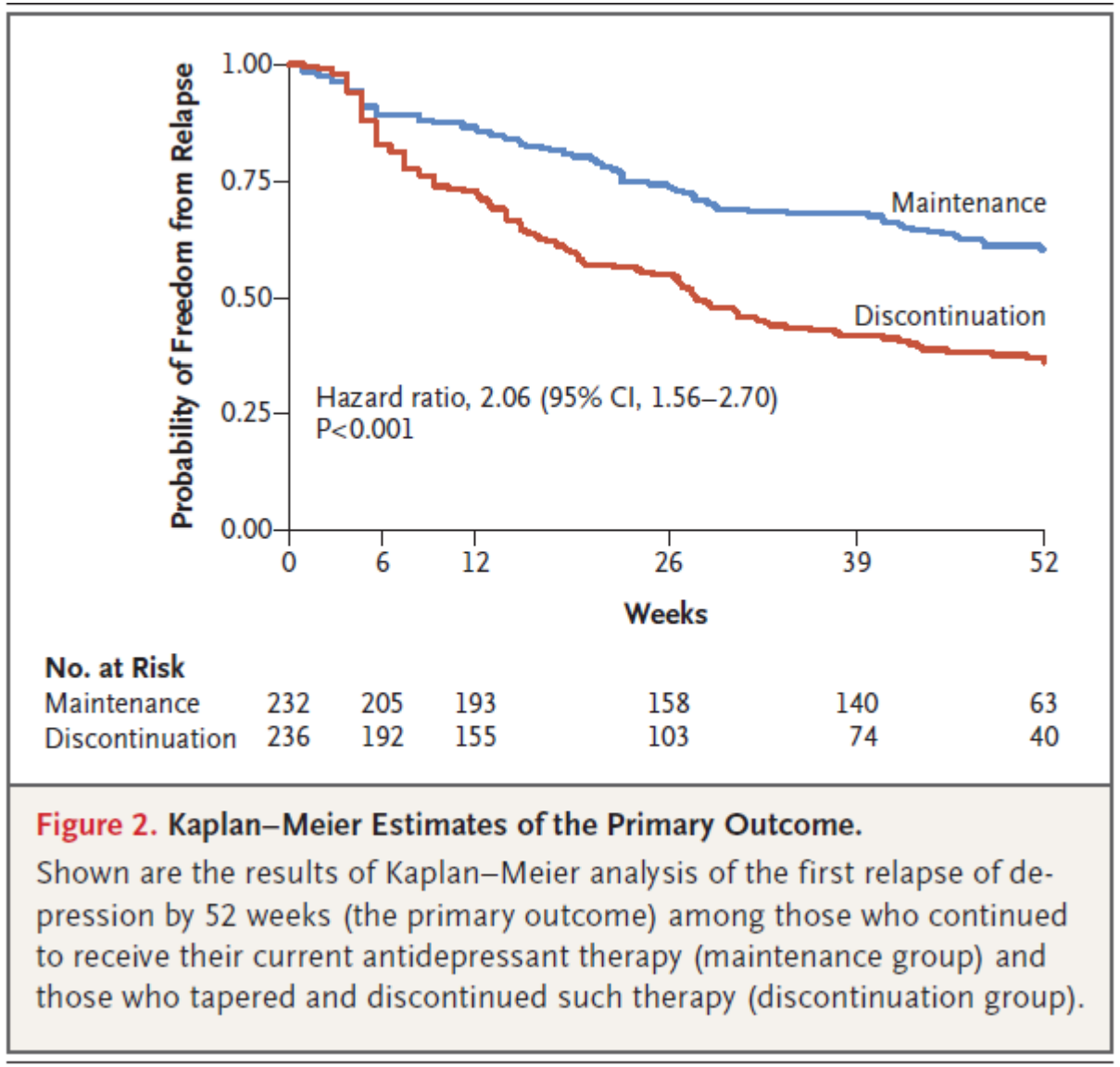

Figure 2. Kaplan–Meier Estimates of the Primary Outcome.

Shown are the results of Kaplan–Meier analysis of the first relapse of depression by 52 weeks (the primary outcome) among those who continued to receive their current antidepressant therapy (maintenance group) and those who tapered and discontinued such therapy (discontinuation group).

Should Mary discontinue her fluoxetine treatment?

- Maybe not…
- …unless of course the initial diagnosis of depression is unclear and/or her adherence to the treatment has already been limited over the past 10 years

Mary's list of questions in 2022

1. My grandson says I should sleep more: is this true?
2. The pain in my right knee is increasing: I heard a « visco-thing » could help.
3. Can I receive the miracle new pill for my hypertension? I want to control my blood pressure better because I have pre-diabetes
4. How about stopping the Fluoxetine treatment?

Mary's list of questions in 2022

1. My grandson says I should sleep more: is this true?
   At Mary's age the benefits of increasing the number of hours she sleeps is uncertain
2. The pain in my right knee is increasing: I heard a « visco-thing » could help.
3. Can I receive the miracle new pill for my hypertension? I want to control my blood pressure better because I have pre-diabetes
4. How about stopping the Fluoxetine treatment?

Mary's list of questions in 2022

1. My grandson says I should sleep more: is this true?
2. The pain in my right knee is increasing: I heard a « visco-thing » could help.
   Viscosupplementation is unlikely to help. Mary should be encouraged to wear stable supportive shoes
3. Can I receive the miracle new pill for my hypertension? I want to control my blood pressure better because I have pre-diabetes
4. How about stopping the Fluoxetine treatment?

Mary's list of questions in 2022

1. My grandson says I should sleep more: is this true?
2. The pain in my right knee is increasing: I heard a « visco-thing » could help.
3. Can I receive the miracle new pill for my hypertension? I want to control my blood pressure better because I have pre-diabetes
   The Quadpill may be a good option. As far as I know it is not yet available in Switzerland…
4. How about stopping the Fluoxetine treatment?

Mary's list of questions in 2022

1. My grandson says I should sleep more: is this true?
2. The pain in my right knee is increasing: I heard a « visco-thing » could help.
3. Can I receive the miracle new pill for my hypertension? I want to control my blood pressure better because I have pre-diabetes
4. How about stopping the Fluoxetine treatment?
   If Mary has had two or more episodes of depression in the past, and has adhered to the treatment, it may be better to keep it or propose another, non-pharmacological treatment instead

List of publications 2021/2022

- Sabia S, Fayosse A, Dumurgier J, et al. **Association of sleep duration in middle and old age with incidence of dementia**. Nat Commun. **2021** Apr 20;12(1):2289
- Pereira TV, Jüni P, Saadat P, et al. **Viscosupplementation for knee osteoarthritis: systematic review and meta-analysis**. BMJ **2022**; 378: e069722
- Paterson KL, Bennell KL, Campbell PK, et al. **The Effect of Flat Flexible Versus Stable Supportive Shoes on Knee Osteoarthritis Symptoms : A Randomized Trial**. Ann Intern Med. **2021** Apr;174(4):462-471.
- Chow CK, Atkins ER, Hillis GS, et al; QUARTET Investigators. **Initial treatment with a single pill containing quadruple combination of quarter doses of blood pressure medicines versus standard dose monotherapy in patients with hypertension (QUARTET): a phase 3, randomised, double-blind, active-controlled trial**. Lancet. **2021** Sep 18;398(10305):1043-1052.
- Nazarzadeh M, Bidel Z, Canoy D, et al; **Blood Pressure Lowering Treatment Trialists' Collaboration. Blood pressure-lowering treatment for prevention of major cardiovascular diseases in people with and without type 2 diabetes: an individual participant-level data meta-analysis**. Lancet Diabetes Endocrinol. **2022** Sep;10(9):645-654.
- Lewis G, Marston L, Duffy L, et al. **Maintenance or Discontinuation of Antidepressants in Primary Care.** N Engl J Med. **2021** Sep 30;385(14):1257-1267.
- Lanocha N, Mahoney D. **Fostering Humanism Through Stories: A Plea for Narrative Medicine in Palliative Care Education**. J Pain Symptom Manage. **2022** Feb 11:S0885-3924(22)00061-6.

Thank you for your attention!

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