

## Los 10 artículos de mayor factor de impacto del 2º semestre 2014

1. Martínez-González MÁ; Toledo E; Arós F; **Fiol M**; Corella D; Salas-Salvadó J; Ros E; Covas MI; Fernández-Crehuet J; Lapetra J; Muñoz MA; Fitó M; Serra-Majem L; Pintó X; Lamuela-Raventós RM; Sorlí JV; Babio N; Buil-Cosiales P; Ruiz-Gutierrez V; Estruch R; Alonso A; PREDIMED Investigators. *Extravirgin olive oil consumption reduces risk of atrial fibrillation: the PREDIMED (Prevención con Dieta Mediterránea) trial*. **CIRCULATION** 2014 Jul 1;130(1):18-26. doi: 10.1161/CIRCULATIONAHA.113.006921. Epub 2014 Apr 30.  
FACTOR DE IMPACTO: 14,948 (Q1)

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### Original Article

### Epidemiology and Prevention

#### Extravirgin Olive Oil Consumption Reduces Risk of Atrial Fibrillation The PREDIMED (Prevención con Dieta Mediterránea) Trial

Miguel Á. Martínez-González, MD, PhD; Estefanía Toledo, MD, PhD;  
Fernando Arós, MD, PhD; Miquel Fiol, MD, PhD; Dolores Corella,  
DPharm, PhD; Jordi Salas-Salvadó, MD, PhD; Emilio Ros, MD, PhD;  
Maria I. Covas, DPharm, PhD; Joaquín Fernández-Crehuet, MD, PhD;  
José Lapetra, MD, PhD; Miguel A. Muñoz, MD, PhD; Monserrat Fitó, MD,  
PhD; Luis Serra-Majem, MD, PhD; Xavier Pintó, MD, PhD;  
Rosa M. Lamuela-Raventós, DPharm, PhD; Jose V. Sorlí, MD, PhD;  
Nancy Babio, BSc, PhD; Pilar Buil-Cosiales, MD, PhD;  
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2. van der Valk RJ, Duijts L, Timpson NJ, Salam MT, Standl M, Curtin JA, Genuneit J, Kerhof M, Kreiner-Møller E, Cáceres A, Gref A, Liang LL, Taal HR, Bouzigon E, Demenais F, Nadif R, Ober C, Thompson EE, Estrada K, Hofman A, Uitterlinden AG, van Duijn C, Rivadeneira F, Li X, Eckel SP, Berhane K, Gauderman WJ, Granell R, Evans DM, St Pourcain B, McArdle W, Kemp JP, Smith GD, Tiesler CM, Flexeder C, Simpson A, Murray CS, Fuchs O, Postma DS, Bønnelykke K, **Torrent M**, Andersson M, Sleiman P, Hakonarson H, Cookson WO, Moffatt MF, Paternoster L, Melén E, Sunyer J, Bisgaard H, Koppelman GH, Ege M, Custovic A, Heinrich J, Gilliland FD, Henderson AJ, Jaddoe VW, de Jongste JC; EARly Genetics & Lifecourse Epidemiology (EAGLE) Consortium. *Fraction of exhaled nitric oxide values in childhood are associated with 17q11.2-q12 and 17q12-q21 variants.* **J ALLERGY CLIN IMMUN** 2014 Jul;134(1):46-55. doi: 10.1016/j.jaci.2013.08.053. Epub 2013 Dec 6.

FACTOR DE IMPACTO: 11,248 (Q1)



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## Fraction of exhaled nitric oxide values in childhood are associated with 17q11.2-q12 and 17q12-q21 variants

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3. Mateos MV; Oriol A; Martínez-López J; Teruel AI; López de la Guía A; López J; Bengoechea E; Pérez M; Martínez R; Palomera L; de Arriba F; González Y; Hernández JM; Granell M; Bello JL; **Bargay J**; Peñalver FJ; Martín-Mateos ML; Paiva B; Montalbán MA; Bladé J; Lahuerta JJ; San-Miguel JF. *GEM2005 trial update comparing VMP/VTP as induction in elderly multiple myeloma patients: do we still need alkylators?*. **BLOOD** 2014 Sep 18;124(12):1887-93.

FACTOR DE IMPACTO: 9,775 (Q1)

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## Regular Article

### CLINICAL TRIALS AND OBSERVATIONS

## GEM2005 trial update comparing VMP/VTP as induction in elderly multiple myeloma patients: do we still need alkylators?

María-Victoria Mateos,<sup>1</sup> Albert Oriol,<sup>2</sup> Joaquín Martínez-López,<sup>3</sup> Ana-Isabel Teruel,<sup>4</sup> Ana López de la Guía,<sup>5</sup> Javier López,<sup>6</sup> Enrique Bengoechea,<sup>7</sup> Montserrat Pérez,<sup>8</sup> Rafael Martínez,<sup>9</sup> Luis Palomera,<sup>10</sup> Felipe de Arriba,<sup>11</sup> Yolanda González,<sup>12</sup> José Mariano Hernández,<sup>13</sup> Miquel Granell,<sup>14</sup> José-Luis Bello,<sup>15</sup> Joan Bargay,<sup>16</sup> Francisco-Javier Peñalver,<sup>17</sup> María-Luisa Martín-Mateos,<sup>18</sup> Bruno Paiva,<sup>19</sup> María-Angeles Montalbán,<sup>3</sup> Joan Bladé,<sup>20</sup> Juan-José Lahuerta,<sup>3</sup> and Jesús F. San-Miguel<sup>19</sup>

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### Key Points

- Melphalan, in combination with bortezomib, should be maintained as one of the standards of care for the treatment of elderly MM patients.
- Complete response and particularly flow complete response should be an important goal in the treatment of elderly myeloma patients.

Melphalan (M), in combination with prednisone (MP), has been the backbone of new combinations, including bortezomib plus MP (VMP). However, new alkylator-free schemes, such as lenalidomide plus low-dose dexamethasone, are challenging the role of alkylators in myeloma treatment of elderly patients. Here we have updated, after a long follow-up (median 6 years), the results of the GEM2005 study that addressed this question by comparing VMP with bortezomib plus thalidomide and prednisone (VTP) as induction. Between April 2005 and October 2008, 260 patients were randomized to receive 6 cycles of VMP or VTP as induction. The median progression-free survival was 32 months for the VMP and 23 months for the VTP arms ( $P = .09$ ). VMP significantly prolonged the overall survival (OS) compared with VTP (median of 63 and 43 months, respectively; hazard ratio [HR]: 0.67,  $P = .01$ ). Achieving immunophenotypic complete response was associated with a significantly longer OS, especially in the VMP arm (66% remain alive after 8 years). Melphalan, plus bortezomib, should be maintained as standard care for the treatment of elderly multiple myeloma patients. This trial was registered at [www.clinicaltrials.gov](http://www.clinicaltrials.gov) as #NCT00443235. (*Blood*. 2014; 124(12): 1887-1893)

4. Yki-Järvinen H; Bergenstal R; Ziemien M; Wardecki M; Muehlen-Bartmer I; Boelle E; Riddle MC; Tellier G; Jones M; Leiter L; Perron P; Punthakee Z; Rizvi Q; Shu D; Ho K; Vitug G; Woo V; Morrison D; Berlingieri J; Gottesman I; Lahsen R; Soto N; Aravena M; Godoy G; Solis C; Larenas G; Palma J; Aburto MF; Valderas JP; Fajardo G; Gutierrez V; Romero C; Yki-Järvinen H; Gouet D; Krempf M; Serusclat P; Clavel S; Lopez I; Hochner I; Böckmann U; Klein C; Sauter J; Wenzl-Bauer V; Chen-Stute A; Kosch C; Kis-Gombos P; Kiss J; Lengyel Z; Nyirati G; Plés Z; Poór F; Taller A; Garza J; Villezca DL; Morales-De TM; Frenk P; Aguilar-Orozco R; Calvo-Vargas C; Leguizamo-Dimas A; Pelayo S; Nicolau A; Bradescu O; Cristescu J; Musat D; Negrisanu G; Avram RI; Cif A; Nafornita V; Ferariu I; Popa B; Pavel MF; Munteanu M; Onaca A; Cerghizan A; Pintilei E; Shustov S; Rodionova T; Vorokhobina N; Zhdanova E; Karpova I; Dreval A; Alpenidze D; Feofanova S; Petunina N; Lantseva O; Zalevskaya A; Morugova T; Badat A; Joshi S; Padayachee T; Ellis G; Bester F; Subias D; Rivas M; Tinahones FJ; Ferrer GJ; Gonzalbez J; **Masmiquel L**; Rosenstock J; Hsieh R; Burr R; Kasper JF; Mandry J; Selam JL; Thrasher J; Lai C; Adkins K; Mikell F; Maheshwari H; Wilson J; Cohen L; Johnson DM; Powell S; Rodbard H; Larocque J; Aroda V; Harris M; Reeves M; Lovell C; De La Rosa R; Wakefield P; O'connor T; Webster B; Palmer J; Blair-Britt L; Vance C; Nakhle S; Bernstein R; Meyers P; Alzohaili O; Lillestol M; Gonzalez-Campoy J; Riffer E; Bauch T; Evans P; Hughes G; Winkle P; Mayfield R; Stegemoller R; Moore P; Hoffman A; Kerwin E; Bergenstal R; Matfin G; Mcknight T; Allen D; Adelizzi A; Condit J; Moretto T; Kwon E; Beavins J; Riveland B; Arif A; Daniel J; Arora S; Kreutter F; Jardula M; Uusinarkaus K; Stringam S; Daboul N; Hsu C; Martin P; Boehm T; Hollander P; Ball E; Reyes H; Houser P; Bauman J; Earl J; Plevin S; Oates S; Simon H; Levinson L; Passaro M; Kessel J; Aronoff S; Welch M; Kulick D; Fogelfeld L; Broker R; Buchanan P; Salem G; Larsen D; Stearns P; Iguh B; Lorch D; Sandoval J; Delgado B; Klein E; Denham D; Fishman N; Fishman N; Wong M. *New insulin glargine 300 units/mL versus glargine 100 units/mL in people with type 2 diabetes using oral agents and basal insulin: glucose control and hypoglycemia in a 6-month randomized controlled trial (EDITION 2)*. **DIABETES CARE** 2014 Dec;37(12):3235-43. doi: 10.2337/dc14-0990. Epub 2014 Sep 5.

FACTOR DE IMPACTO: 8,570 (Q1)



## New Insulin Glargine 300 Units/mL Versus Glargine 100 Units/mL in People With Type 2 Diabetes Using Oral Agents and Basal Insulin: Glucose Control and Hypoglycemia in a 6-Month Randomized Controlled Trial (EDITION 2)

**Hannele Yki-Järvinen<sup>1</sup>, Richard Bergenstal<sup>2</sup>, Monika Ziemien<sup>3</sup>, Marek Wardecki<sup>4</sup>, Isabel Muehlen-Bartmer<sup>5</sup>, Emmanuelle Boelle<sup>5</sup> and Matthew C. Riddle<sup>6</sup> on behalf of the EDITION 2 Study Investigators**

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### Abstract

**OBJECTIVE** To compare the efficacy and safety of new insulin glargine 300 units/mL (Gla-300) with glargine 100 units/mL (Gla-100) in people with type 2 diabetes using basal insulin ( $\geq 42$  units/day) plus oral antihyperglycemic drugs (OADs).

**RESEARCH DESIGN AND METHODS** EDITION 2 was a multicenter, open-label, two-arm study. Adults receiving basal insulin plus OADs were randomized to Gla-300 or Gla-100 once daily for 6 months. The primary end point was change in HbA<sub>1c</sub>. The main secondary end point was percentage of participants with one or more nocturnal confirmed ( $\leq 3.9$  mmol/L [ $\leq 70$  mg/dL]) or severe hypoglycemic events from week 9 to month 6.

**RESULTS** Randomized participants ( $n = 811$ ) had a mean (SD) HbA<sub>1c</sub> of 8.24% (0.82) and BMI of 34.8 kg/m<sup>2</sup> (6.4). Glycemic control improved similarly with both basal insulins; least squares mean (SD) reduction from baseline was  $-0.57\%$  (0.09) for Gla-300 and  $-0.56\%$  (0.09) for Gla-100 (mean difference  $-0.01\%$  [95% CI  $-0.14$  to  $0.12$ ]), with 10% higher dose of Gla-300. Less nocturnal confirmed ( $\leq 3.9$  mmol/L [ $\leq 70$  mg/dL]) or severe hypoglycemia was observed with Gla-300 from week 9 to month 6 (relative risk 0.77 [95% CI 0.61–0.99];  $P = 0.038$ ) and during the first 8 weeks. Fewer nocturnal and any time (24 h) hypoglycemic events were reported during the entire 6-month period. Weight gain was lower with Gla-300 than with Gla-100 ( $P = 0.015$ ). No between-treatment differences in safety parameters were identified.

**CONCLUSIONS** Gla-300 was as effective as Gla-100 and associated with a lower risk of hypoglycemia during the night and at any time of the day.

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### This Article

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#### Abstract

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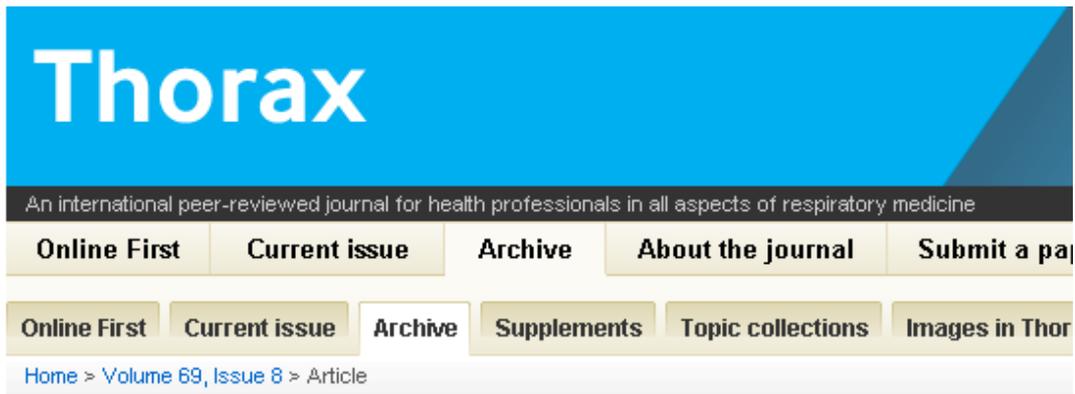
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5. **Cosío BG**; Shafiek H; **Fiorentino F**; Gómez C; **López M**; **Rios A**; Kersul A; **Togores B**; Palmer J; **Sauleda J**; Agustí A. *Structure-function relationship in COPD revisited: an in vivo microscopy view*. **THORAX** 2014 Aug;69(8):724-30. doi: 10.1136/thoraxjnl-2013-204479. Epub 2014 Jan 29.

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## Chronic obstructive pulmonary disease

### Original article

# Structure–function relationship in COPD revisited: an in vivo microscopy view

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6. Cuijpers P; Koole SL; van Dijke A; **Roca M**; Li J; Reynolds CF. *Psychotherapy for subclinical depression: meta-analysis*. **BRIT J PSYCHIAT** 2014 Oct;205(4):268-74. doi: 10.1192/bjp.bp.113.138784.

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## Psychotherapy for subclinical depression: meta-analysis

Pim Cuijpers, Sander L. Koole, Annemiek van Dijke, Miquel Roca,  
Juan Li and Charles F. Reynolds III

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7. Dadvand P; Nieuwenhuijsen MJ; Agustí A; de Batlle J; Benet M; Beelen R; Cirach M; Martinez D; Hoek G; Basagaña X; Ferrer A; Ferrer J; Rodriguez-Roisin R; **Sauleda J**; Guerra S; Antó JM; Garcia-Aymerich J. *Air pollution and biomarkers of systemic inflammation and tissue repair in COPD patients*. **EUR RESPIR J** 2014 Sep;44(3):603-13. doi: 10.1183/09031936.00168813. Epub 2014 Feb 20.

FACTOR DE IMPACTO: 7,125 (Q1)

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### Air pollution and biomarkers of systemic inflammation and tissue repair in COPD patients

**Payam Dadvand**<sup>1,2†</sup>, **Mark J. Nieuwenhuijsen**<sup>1,2</sup>,  
**Àlvar Agustí**<sup>3,4,5</sup>, **Jordi de Batlle**<sup>6</sup>, **Marta Benet**<sup>1,2,7</sup>,  
**Rob Beelen**<sup>8</sup>, **Marta Cirach**<sup>1,2</sup>, **David Martinez**<sup>1,2</sup>,  
**Gerard Hoek**<sup>8</sup>, **Xavier Basagaña**<sup>1,2</sup>, **Antoni Ferrer**<sup>3,7,9</sup>,  
**Jaume Ferrer**<sup>3,10</sup>, **Robert Rodriguez-Roisin**<sup>3,4</sup>,  
**Jaume Sauleda**<sup>3,11,12</sup>, **Stefano Guerra**<sup>1,2,7,13</sup>,  
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#### Abstract

The origin(s) of systemic inflammation in patients with chronic obstructive pulmonary disease (COPD) is unclear. We investigated the impact of exposure to ambient air pollution on systemic biomarkers of inflammation (C-reactive protein (CRP), tumour necrosis factor- $\alpha$ , interleukin (IL)-6, IL-8 and fibrinogen) and tissue repair (hepatocyte growth factor (HGF)) in 242 clinically stable COPD patients (mean age 67.8 years and forced expiratory volume in 1 s 71.3% predicted) in Barcelona, Spain, in 2004–2006.

A spatiotemporal exposure assessment framework was applied to predict ambient nitrogen dioxide (NO<sub>2</sub>) and levels of particles with a 50% cut-off aerodynamic diameter of 2.5  $\mu$ m (PM<sub>2.5</sub>) at each participant's home address during 10 periods of 24 h (lags 1–10) and 1 year prior to the blood sampling date. We used linear regression models to estimate associations between biomarkers and exposure levels.

An interquartile range (IQR) increase in NO<sub>2</sub> exposure in lag 5 was associated with 51%, 10% and 9% increases in CRP, fibrinogen and HGF levels respectively. We also observed 12% and 8% increases in IL-8 associated with an IQR increase in NO<sub>2</sub> exposure in lag 3 and over the year before sampling, respectively. These increases were larger in former smokers. The results for PM<sub>2.5</sub> were not conclusive.

These results show that exposure to ambient NO<sub>2</sub> increases systemic inflammation in COPD patients, especially in former smokers.

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8. de-Torres JP; Marin JM; Martinez-Gonzalez C; de Lucas-Ramos P; Mir-Viladrich I; **Cosio B**; Peces-Barba G; Calle-Rubio M; Solanes-García I; Balbin RA; de Diego-Damia A; Feu-Collado N; Michavila IA; Irigaray R; Balcells E; Casanovas AL; Galdiz Iturri JB; Royo MM; Soler-Cataluña JJ; Lopez-Campos JL; Soriano JB; Casanova C. *Clinical Application of the COPD Assessment Test Longitudinal Data From the COPD History Assessment in Spain (CHAIN) Cohort*. **CHEST** 2014 Jul;146(1):111-22. doi: 10.1378/chest.13-2246.

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### Clinical Application of the COPD Assessment Test: Longitudinal Data From the COPD History Assessment in Spain (CHAIN) Cohort

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**Abstract**

**OBJECTIVE:** The COPD Assessment Test (CAT) has been proposed for assessing health status in COPD, but little is known about its longitudinal changes. The objective of this study was to evaluate 1-year CAT stability in patients with stable COPD and to relate its variations to changes in other disease markers.

**METHODS:** We evaluated the following variables in smokers with and without COPD at baseline and after 1 year: CAT score, age, sex, smoking status, pack-year history, BMI, modified Medical Research Council (mMRC) scale, 6-min walk distance (6MWD), lung function, BODE (BMI, obstruction, dyspnea, exercise capacity) index, hospital admissions, Hospital and Depression Scale, and the Charlson comorbidity index. In patients with COPD, we explored the association of CAT scores and 1-year changes in the studied parameters.

**RESULTS:** A total of 824 smokers with COPD and 126 without COPD were evaluated at baseline and 441 smokers with COPD and 66 without COPD 1 year later. At 1 year, CAT scores for patients with COPD were similar ( $\pm 4$  points) in 56%, higher in 27%, and lower in 17%. Of note, mMRC scale scores were similar ( $\pm 1$  point) in 46% of patients, worse in 36%, and better in 18% at 1 year. One-year CAT changes were best predicted by changes in mMRC scale scores ( $\beta$ -coefficient, 0.47;  $P < .001$ ). Similar results were found for CAT and mMRC scale score in smokers without COPD.

**CONCLUSION:** One-year longitudinal data show stability in CAT scores among patients with stable COPD similar to mMRC scale score, which is the best predictor of 1-year CAT changes. Further longitudinal studies should confirm long-term CAT stability and its clinical applicability.

**TRIAL REGISTRY:** ClinicalTrials.gov; No.: NCT01122758; URL: [www.clinicaltrials.gov](http://www.clinicaltrials.gov)

9. Roswall N; Angquist L; Ahluwalia TS; **Romaguera D**; Larsen SC; Ostergaard JN; Halkjær J; Vimalaswaran KS; Wareham NJ; Bendinelli B; Palli D; Boer JM; van der A DL; Boeing H; Loos RJ; Sørensen TI; Tjønneland A. *Association between Mediterranean and Nordic diet scores and changes in weight and waist circumference: influence of FTO and TCF7L2 loci*. **AM J CLIN NUTR** 2014 Oct;100(4):1188-97. doi: 10.3945/ajcn.114.089706. Epub 2014 Aug 6.

FACTOR DE IMPACTO: 6,918 (Q1)



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### **Association between Mediterranean and Nordic diet scores and changes in weight and waist circumference: influence of *FTO* and *TCF7L2* loci<sup>1,2,3</sup>**

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10. Buil-Cosiales P; Zazpe I; Toledo E; Corella D; Salas-Salvadó J; Diez-Espino J; Ros E; Fernandez-Creuet Navajas J; Santos-Lozano JM; Arós F; **Fiol M**; Castañer O; Serra-Majem L; Pintó X; Lamuela-Raventós RM; Martí A; Basterra-Gortari FJ; Sorlí JV; Verdú-Rotellar JM; Basora J; Ruiz-Gutierrez V; Estruch R; Martínez-González MÁ. *Fiber intake and all-cause mortality in the Prevención con Dieta Mediterránea (PREDIMED) study*. **AM J CLIN NUTR** 2014 Dec;100(6):1498-507. doi: 10.3945/ajcn.114.093757. Epub 2014 Sep 10.

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## **Fiber intake and all-cause mortality in the Prevención con Dieta Mediterránea (PREDIMED) study<sup>1,2,3</sup>**

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