

TIME to START- YAŞLIDA BAŞLANMASI UYGUN OLAN İLAÇLAR

Bu grup ilaçların, kriter içeriğindeki durumlarda kullanımının yaşlılarda endikasyonu ve potansiyel faydalanımı vardır ancak klinik pratikte sıklıkla gözden kaçabilmekte veya ileri yaş nedeniyle, geçerli ek bir sebep olmaksızın, verilmemektedir. Bu ilaçların kriter içeriğindeki durumda kullanılmaması “potansiyel uygunsuz ilaç kullanımı” olarak nitelendirilmektedirler. Klinisyenler hastanın tüm özellikleriyle ilacın hastasındaki potansiyel fayda ve zararını (kar-zarar dengesini), beklenen yaşam süresini ve hasta/bakımveren tercihleri doğrultusunda saptanan tedavi hedeflerini göz önünde bulundurarak karar vermelidir. Bu grup ilaçları klinisyenler bazı olgularda kullanmamayı uygun bulabilir.

TIME-to-START Kriterleri (referanslı ve açıklamalı)

A: Kardiyovasküler Sistem kriterleri.

A1. Dökümanate aterosklerotik koroner arter hastalığı (geçirilmiş akut koroner sendrom/koroner anjioplasti veya stentleme/koroner arter bypass greftleme/abdominal aort anevrizması), dökümanate aterosklerotik serebrovasküler hastalık (geçirilmiş iskemik inme/GİA/ geçirilmiş karotis endarterektomi veya stentleme) veya semptomatik alt ekstremitte arter hastalığı olan hastalarda sekonder korunma amaçlı antiplatelet tedavi (aspirin veya klopidogrel) başlanması uygundur

**Primer kardiyovasküler korunma amaçlı aspirin başlanması çoğu olguda uygun değildir (intrakranial ve GİS kanama riskinde artış ve sınırlı faydalanım nedeniyle).*

A1(i): Zuckerman IH, Yin X, Rattinger GB, Gottlieb SS, Simoni-Wastila L, Pierce SA, Huang TY, Shenolikar R, Stuart B. Effect of exposure to evidence-based pharmacotherapy on outcomes after acute myocardial infarction in older adults. J Am Geriatr Soc 2012; 60(10): 1854-61.

A1(ii): Alonso-Coello P, Bellmunt S, McGorrian C, Anand SS, Guzman R, Criqui MH, AkIEA, Olav Vandvik P, Lansberg MG, Guyatt GH, Spencer FA; American College of Chest Physicians. Antithrombotic therapy in peripheral artery disease: Antithrombotic Therapy and Prevention of Thrombosis, 9th ed: American College of Chest Physicians Evidence-Based Clinical Practice Guidelines. Chest 2012; 141(2Suppl): e669S-90S.

A1(iii): Fleg JL, Aronow WS, Frishman WH. Cardiovascular drug therapy in the elderly: benefits and challenges. Nat Rev Cardiol 2011; 8(1): 13-28.

A1(iv): Vandvik PO, Lincoff AM, Gore JM, Gutterman DD, Sonnenberg FA, Alonso-Coello P, Akl EA, Lansberg MG, Guyatt GH, Spencer FA; American College of Chest Physicians. Primary and secondary prevention of cardiovascular disease: Antithrombotic Therapy and Prevention of Thrombosis, 9th ed: American College of Chest Physicians Evidence-Based Clinical Practice Guidelines. Chest 2012; 141(2Suppl): e637S-68S. Erratum in: Chest 2012; 141(4): 1129. Dosage error in article text.

A1(v): O'Mahony D, O'Sullivan D, Byrne S, O'Connor MN, Ryan C, Gallagher P. STOPP/START criteria for potentially inappropriate prescribing in older people: version 2. Age Ageing. 2015 Mar;44(2):213-8. doi: 10.1093/ageing/afu145. Epub 2014 Oct 16.

A1(vi): McNeil JJ, Wolfe R, Woods RL, Tonkin AM, Donnan GA, Nelson MR, Reid CM, Lockery JE, Kirpach B, Storey E, Shah RC, Williamson JD, Margolis KL, Ernst ME, Abhayaratna WP, Stocks N, Fitzgerald SM, Orchard SG, Trevaks RE, Beilin LJ, Johnston CI, Ryan J, Radziszewska B, Jelinek M, Malik M, Eaton CB, Brauer D, Cloud G, Wood EM, Mahady SE, Satterfield S, Grimm R, Murray AM; ASPREE Investigator Group. Effect of Aspirin on Cardiovascular Events and Bleeding in the Healthy Elderly. N Engl J Med. 2018 Oct 18;379(16):1509-1518.

A1(vii): ASCEND Study Collaborative Group, Bowman L, Mafham M, Wallendszus K, Stevens W, Buck G, Barton J, Murphy K, Aung T, Haynes R, Cox J, Murawska A, Young A, Lay M, Chen F, Sammons E, Waters E, Adler A, Bodansky J, Farmer A, McPherson R, Neil A, Simpson D, Peto R, Baigent C, Collins R, Parish S, Armitage J. Effects of Aspirin for Primary Prevention in Persons with Diabetes Mellitus. N Engl J Med. 2018 Oct 18;379(16):1529-1539.

A1(viii): Aboyans V, Ricco JB, Bartelink MEL, Björck M, Brodmann M, Cohnert T, Collet JP, Czerny M, De Carlo M, Debus S, Espinola-Klein C, Kahan T, Kownator S, Mazzolai L, Naylor AR, Roffi M, Röther J, Sprynger M, Tendera M, Tepe G, Venermo M, Vlachopoulos C, Desormais I; ESC Scientific Document Group. 2017 ESC Guidelines on the Diagnosis and Treatment of Peripheral Arterial Diseases, in collaboration with the European Society for Vascular Surgery (ESVS): Document covering atherosclerotic disease of extracranial carotid and vertebral, mesenteric, renal, upper and lower extremity arteries Endorsed by: the European Stroke Organization (ESO) The Task Force for the Diagnosis and Treatment of Peripheral Arterial Diseases of the European Society of Cardiology (ESC) and of the European Society for Vascular Surgery (ESVS). Eur Heart J. 2018 Mar 1;39(9):763-816.

A1(ix): Authors/Task Force Members: Piepoli MF, Hoes AW, Agewall S, Albus C, Brotons C, Catapano AL, Cooney MT, Corrà U, Cosyns B, Deaton C, Graham I, Hall MS, Hobbs FDR, Løchen ML, Löllgen H, Marques-Vidal P, Perk J, Prescott E, Redon J, Richter DJ, Sattar N, Smulders Y, Tiberi M, Bart van der Worp H, van Dis I, Verschuren WMM. 2016 European Guidelines on cardiovascular disease prevention in clinical practice: The Sixth Joint Task Force of the European Society of Cardiology and Other Societies on Cardiovascular Disease Prevention in Clinical Practice (constituted by representatives of 10 societies and by invited experts) Developed with the special contribution of the European Association for Cardiovascular Prevention & Rehabilitation (EACPR). Atherosclerosis. 2016 Sep;252:207-274.

A2. Dökümante aterosklerotik koroner arter hastalığı (geçirilmiş akut koroner sendrom/koroner anjioplasti veya stentleme/koroner arter bypass greftleme/abdominal aort anevrizması), dökümante serebrovasküler hastalık (geçirilmiş iskemik inme/GiA/geçirilmiş karotis endarterektomi veya stentleme) veya periferik arter hastalığı olan hastalarda sekonder korunma amaçlı statin tedavisi başlanması uygundur

**Yaşam beklentisi <2 yıl olan hastalarda, terminal demansı olanlarda, >85 yaş hastalarda statinden beklenen faydalanım düşüktür; statin yan etkileri (miyopati, karaciğer toksisitesi ...vb) daha fazladır.*

**Bu olgularda, statin tedavisi kararı hasta/hasta yakını bilgilendirmesi ve ortak karar verme ilkesi ile belirlenmelidir.*

A2(i): Mills EJ, Wu P, Chong G, Ghement I, Singh S, Akl EA, Eyawo O, Guyatt G, Berwanger O, Briel M. Efficacy and safety of statin treatment for cardiovascular disease: a network meta-analysis of 170,255 patients from 76 randomized trials. QJM 2011; 104(2): 109-24. Review.

A2(ii): Brugts JJ, Yetgin T, Hoeks SE, Gotto AM, Shepherd J, Westendorp RG, de Craen AJ, Knopp RH, Nakamura H, Ridker P, van Domburg R, Deckers JW. The benefits of statins in people without established cardiovascular disease but with cardiovascular risk factors: meta-analysis of randomised controlled trials. *BMJ* 2009; 338: b2376. Review

A2(iii): Amarenco P, Labreuche J. Lipid management in the prevention of stroke: review and updated meta-analysis of statins for stroke prevention. *Lancet Neurol* 2009; 8(5): 453-63. Review.

A2(iv): Onder G, Landi F, Fusco D, Corsonello A, Tosato M, Battaglia M, Mastropaolo S, Settanni S, Antocicco M, Lattanzio F. Recommendations to prescribe in complex older adults: results of the CRITERIA to assess appropriate Medication use among Elderly complex patients (CRIME) project. *Drugs Aging*. 2014 Jan;31(1):33-45. Review.

A2(v): O'Mahony D, O'Sullivan D, Byrne S, O'Connor MN, Ryan C, Gallagher P. STOPP/START criteria for potentially inappropriate prescribing in older people: version 2. *Age Ageing*. 2015 Mar;44(2):213-8. doi: 10.1093/ageing/afu145. Epub 2014 Oct 16. Review.

A2(vi): Aboyans V, Ricco JB, Bartelink MEL, Björck M, Brodmann M, Cohnert T, Collet JP, Czerny M, De Carlo M, Debus S, Espinola-Klein C, Kahan T, Kownator S, Mazzolai L, Naylor AR, Roffi M, Röther J, Sprynger M, Tendera M, Tepe G, Venermo M, Vlachopoulos C, Desormais I; ESC Scientific Document Group. 2017 ESC Guidelines on the Diagnosis and Treatment of Peripheral Arterial Diseases, in collaboration with the European Society for Vascular Surgery (ESVS): Document covering atherosclerotic disease of extracranial carotid and vertebral, mesenteric, renal, upper and lower extremity arteries Endorsed by: the European Stroke Organization (ESO) The Task Force for the Diagnosis and Treatment of Peripheral Arterial Diseases of the European Society of Cardiology (ESC) and of the European Society for Vascular Surgery (ESVS). *Eur Heart J*. 2018 Mar 1;39(9):763-816.

A2(vii): Authors/Task Force Members; Piepoli MF, Hoes AW, Agewall S, Albus C, Brotons C, Catapano AL, Cooney MT, Corrà U, Cosyns B, Deaton C, Graham I, Hall MS, Hobbs FDR, Løchen ML, Löllgen H, Marques-Vidal P, Perk J, Prescott E, Redon J, Richter DJ, Sattar N, Smulders Y, Tiberi M, Bart van der Worp H, van Dis I, Verschuren WMM. 2016 European Guidelines on cardiovascular disease prevention in clinical practice: The Sixth Joint Task Force of the European Society of Cardiology and Other Societies on Cardiovascular Disease Prevention in Clinical Practice (constituted by representatives of 10 societies and by invited experts) Developed with the special contribution of the European Association for Cardiovascular Prevention & Rehabilitation (EACPR). *Atherosclerosis*. 2016 Sep;252:207-274.

A2(viii): Fleg JL, Forman DE, Berra K, Bittner V, Blumenthal JA, Chen MA, Cheng S, Kitzman DW, Maurer MS, Rich MW, Shen WK, Williams MA, Zieman SJ; American Heart Association Committees on Older Populations and Exercise Cardiac Rehabilitation and Prevention of the Council on Clinical Cardiology, Council on Cardiovascular and Stroke Nursing, Council on Lifestyle and Cardiometabolic He. Secondary prevention of atherosclerotic cardiovascular disease in older adults: a scientific statement from the American Heart Association. *Circulation*. 2013 Nov 26;128(22):2422-46.

A3. Sistolik kan basıncı sürekli olarak >160 mmHg ve/veya diastolik kan basıncı sürekli olarak >90 mmHg olan hastalarda antihipertansif tedavi başlanması uygundur

A3(i): Williams B, Poulter NR, Brown MJ, Davis M, McInnes GT, Potter JF, Sever PS, Thom SM; BHS guidelines working party, for the British Hypertension Society. British Hypertension Society guidelines for hypertension management 2004 (BHS-IV): summary. *BMJ* 2004; 328(7440):634-40. Erratum in: *BMJ* 2004; 328(7445): 926.

A3(ii): Papademetriou V, Farsang C, Elmfeldt D, Hofman A, Lithell H, Olofsson B, Skoog I, Trenkwalder P, Zanchetti A; Study on Cognition and Prognosis in the Elderly study group. Stroke prevention with the angiotensin II type 1-receptor blocker candesartan in elderly patients with isolated systolic hypertension: the Study on Cognition and Prognosis in the Elderly (SCOPE). *J Am Coll Cardiol* 2004; 44(6): 1175-80.

A3(iii): Bejan-Angoulvant T, Saadatian-Elahi M, Wright JM, Schron EB, Lindholm LH, Fagard R, Staessen JA, Gueyffier F. Treatment of hypertension in patients 80years and older: the lower the better? A meta-analysis of randomized controlled trials. *J Hypertens* 2010; 28(7): 1366-72.

A3(iv): George L B. Treatment of hypertension in patients with diabetes mellitus. In: UpToDate, Post, TW (Ed), UpToDate, Waltham, MA, 2019 Son erişim tarihi 23 Ekim 2019.

A3(v): Williams B, Mancia G, Spiering W, Agabiti Rosei E, Azizi M, Burnier M, Clement D, Coca A, De Simone G, Dominiczak A, Kahan T, Mahfoud F, Redon J, Ruilope L, Zanchetti A, Kerins M, Kjeldsen S, Kreutz R, Laurent S, Lip GYH, McManus R, Narkiewicz K, Ruschitzka F, Schmieder R, Shlyakhto E, Tsioufis K, Aboyans V, Desormais I. 2018 Practice guidelines for the management of arterial hypertension of the European Society of Hypertension (ESH) and the European Society of Cardiology (ESC). *Blood Press*. 2018 Dec;27(6):314-340.

A3(vi): Paul K. Whelton, Robert M. Carey, Wilbert S. Aronow, Donald E. Casey Jr., Karen J. Collins, Cheryl Dennison Himmelfarb, Sondra M. DePalma, Samuel Gidding, Kenneth A. Jamerson, Daniel W. Jones, Eric J. MacLaughlin, Paul Muntner, Bruce Ovbiagele, Sidney C. Smith Jr., Crystal C. Spencer, Randall S. Stafford, Sandra J. Taler, Randal J. Thomas, Kim A. Williams Sr., Jeff D. Williamson and Jackson T. Wright Jr. 2017 ACC/AHA/AAPA/ABC/ACPM/AGS/APhA/ASH/ASPC/NMA/PCNA Guideline for the Prevention, Detection, Evaluation, and Management of High Blood Pressure in Adults A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines. *J Am Coll Cardiol* 2018;71:e127-e248

A3(vii): O'Mahony D, O'Sullivan D, Byrne S, O'Connor MN, Ryan C, Gallagher P. STOPP/START criteria for potentially inappropriate prescribing in older people: version 2. *Age Ageing*. 2015 Mar;44(2):213-8. doi: 10.1093/ageing/afu145. Epub 2014 Oct 16. Review.

A4. Kronik non-valvüler AF varlığında, CHA₂DS₂-VASc skoru göz önüne alınarak, OAK (vitamin K antagonistleri, direkt trombin inhibitörleri veya faktor Xa inhibitörleri) başlanması uygundur

**Vitamin K antagonistleri yerine non vitamin K antagonisti'nin (YOAK) tercih edilmesi önerilir.*

A4(i): Hughes M, Lip GY; Guideline Development Group, National Clinical Guideline for Management of Atrial Fibrillation in Primary and Secondary Care, National Institute for Health and Clinical Excellence. Stroke and thromboembolism in atrial fibrillation: a systematic review of stroke risk factors, risk stratification schema and cost effectiveness data. *Thromb Haemost* 2008; 99(2): 295-304 Review.

A4(ii): Dentali F, Riva N, Crowther M, Turpie AG, Lip GY, Ageno W. Efficacy and safety of the novel oral anticoagulants in atrial fibrillation: a systematic review and meta-analysis of the literature. *Circulation* 2012; 126(20): 2381-91. Review.

A4(iii): Hart RG, Pearce LA, Aguilar MI. Meta-analysis: antithrombotic therapy to prevent stroke in patients who have non-valvular atrial fibrillation. *Ann Intern Med* 2007; 146(12): 857-67.

A4(iv): Aguilar MI, Hart R. Oral anticoagulants for preventing stroke in patients with non-valvular atrial fibrillation and no previous history of stroke or transient ischemic attacks. *Cochrane Database of Systematic Reviews* 2005, Issue 3. Art. No.: CD001927.

A4(v): Kirchhof P, Benussi S, Kotecha D, Ahlsson A, Atar D, Casadei B, Castella M, Diener HC, Heidbuchel H, Hendriks J, Hindricks G, Manolis AS, Oldgren J, Popescu BA, Schotten U, Van Putte B, Vardas P, Agewall S, Camm J, Baron Esquivias G, Budts W, Carerj S, Casselman F, Coca A, De Caterina R, Deftereos S, Dobrev D, Ferro JM, Filippatos G, Fitzsimons D, Gorenek B, Guenoun M, Hohnloser SH, Kolh P, Lip GY, Manolis A, McMurray J, Ponikowski P, Rosenhek R, Ruschitzka F, Savelieva I, Sharma S, Suwalski P, Tamargo JL, Taylor CJ, Van Gelder IC, Voors AA, Windecker S, Zamorano JL, Zeppenfeld K. 2016 ESC Guidelines for the management of atrial fibrillation developed in collaboration with EACTS. *Eur J Cardiothorac Surg*. 2016 Nov;50(5):e1-e88.

A4(vi): O'Mahony D, O'Sullivan D, Byrne S, O'Connor MN, Ryan C, Gallagher P. STOPP/START criteria for potentially inappropriate prescribing in older people: version 2. *Age Ageing*. 2015 Mar;44(2):213-8.

A5. Sistolik kalp yetersizliği (EF<= %40) veya ST elevasyonlu Mİ varlığında ACE inhibitörü tedavisi başlanması uygundur

A5(i): Fleg JL, Aronow WS, Frishman WH. Cardiovascular drug therapy in the elderly: benefits and challenges. *Nat Rev Cardiol* 2011; 8(1):13-28. Review.

A5(ii): Arif SA, Mergenhagen KA, Del Carpio RO, Ho C. Treatment of systolic heart failure in the elderly: an evidence-based review. *Ann Pharmacother* 2010; 44(10): 1604-14. Review.

A5(iii): Lahoud R, Howe M, Krishnan SM, Zacharias S, Jackson EA. Effect of use of combination evidence-based medical therapy after acute coronary syndromes on long-term outcomes. *Am J Cardiol* 2012; 109(2): 159-64.

A5(iv): Ibanez B, James S, Agewall S, Antunes MJ, Bucciarelli-Ducci C, Bueno H, Caforio ALP, Crea F, Goudevenos JA, Halvorsen S, Hindricks G, Kastrati A, Lenzen MJ, Prescott E, Roffi M, Valgimigli M, Varenhorst C, Vranckx P, Widimský P. [2017 ESC Guidelines for the management of acute myocardial infarction in patients presenting with ST-segment elevation.]. *Kardiol Pol*. 2018;76(2):229-313.

A5(v): Marco Roffi, Carlo Patrono, Jean-Philippe Collet, Christian Mueller, Marco Valgimigli, Felicita Andreotti, Jeroen J. Bax, Michael A. Borger, Carlos Brotons, Derek P. Chew, Baris Gencer, Gerd Hasenfuss, Keld Kjeldsen, Patrizio Lancellotti, Ulf Landmesser, Julinda Mehilli, Debabrata Mukherjee, Robert F. Storey, Stephan Windecker, ESC Scientific Document Group, 2015 ESC Guidelines for the management of acute coronary syndromes in patients presenting without persistent ST-segment elevation: Task Force for the Management of Acute Coronary Syndromes in Patients Presenting without Persistent ST-Segment Elevation of the European Society of Cardiology (ESC), *European Heart Journal*, Volume 37, Issue 3, 14 January 2016, Pages 267–315.

A5(vi): Task Force Members, Montalescot G, Sechtem U, Achenbach S, Andreotti F, Arden C, Budaj A, Bugiardini R, Crea F, Cuisset T, Di Mario C, Ferreira JR, Gersh BJ, Gitt AK, Hulot JS, Marx N, Opie LH, Pfisterer M, Prescott E, Ruschitzka F, Sabaté M, Senior R, Taggart DP, van der Wall EE, Vrints CJ; ESC Committee for Practice Guidelines, Zamorano JL, Achenbach S, Baumgartner H, Bax JJ, Bueno H, Dean V, Deaton C, Erol C, Fagard R, Ferrari R, Hasdai D, Hoes AW, Kirchhof P, Knuuti J, Kolh P, Lancellotti P, Linhart A, Nihoyannopoulos P, Piepoli MF, Ponikowski P, Sirnes PA, Tamargo JL, Tendera M, Torbicki A, Wijns W, Windecker S; Document Reviewers, Knuuti J, Valgimigli M, Bueno H, Claeys MJ, Donner-Banzhoff N, Erol C, Frank H, Funck-Brentano C, Gaemperli O, Gonzalez-Juanatey JR, Hamilos M, Hasdai D, Husted S, James SK, Kervinen K, Kolh P, Kristensen SD, Lancellotti P, Maggioni AP, Piepoli MF, Pries AR, Romeo F, Rydén L, Simoons ML, Sirnes PA, Steg PG, Timmis A, Wijns W, Windecker S, Yildirim A, Zamorano JL. 2013 ESC guidelines on the management of stable coronary artery disease: the Task Force on the management of stable coronary artery disease of the European Society of Cardiology. *Eur Heart J*. 2013 Oct;34(38):2949-3003.

A5(vii): Fihn SD, Gardin JM, Abrams J, Berra K, Blankenship JC, Dallas AP, Douglas PS, Foody JM, Gerber TC, Hinderliter AL, King SB 3rd, Kligfield PD, Krumholz HM, Kwong RY, Lim MJ, Linderbaum JA, Mack MJ, Munger MA, Prager RL, Sabik JF, Shaw LJ, Sikkema JD, Smith CR Jr, Smith SC Jr, Spertus JA, Williams SV; American College of Cardiology Foundation; American Heart Association Task Force on Practice Guidelines; American College of Physicians; American Association for Thoracic Surgery; Preventive Cardiovascular Nurses Association; Society for Cardiovascular Angiography and Interventions; Society of Thoracic Surgeons. 2012 ACCF/AHA/ACP/AATS/PCNA/SCAI/STS Guideline for the diagnosis and management of patients with stable ischemic heart disease: a report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines, and the American College of Physicians, American Association for Thoracic Surgery, Preventive Cardiovascular Nurses Association, Society for Cardiovascular Angiography and Interventions, and Society of Thoracic Surgeons. *J Am Coll Cardiol*. 2012 Dec 18;60(24):e44-e164.

A5(viii): O'Mahony D, O'Sullivan D, Byrne S, O'Connor MN, Ryan C, Gallagher P. STOPP/START criteria for potentially inappropriate prescribing in older people: version 2. Age Ageing. 2015 Mar;44(2):213-8. doi: 10.1093/ageing/afu145. Epub 2014 Oct 16. Review.

A6. Sistolik kalp yetersizliđi (EF≤ %40) veya iskemik kalp hastalıđı (kronik iskemik kalp hastalıđında antianjinal etki/Mİ sonrası dönemde mortalite dűşürücü etki nedeniyle) varlıđında beta-bloker tedavi (sistolik KY'de bisoprolol/uzamıř salınımlı metoprolol süksinat/karvedilol/nebivolol; iskemik kalp hastalıđında herhangi bir beta-bloker) başlanması uygundur

**Miyokard infarktűsűnden 3 yıl sonra beta-bloker tedavi potansiyel kar-zarar dengesi göz önűnde bulundurulurak kesilebilir.*

A6(i): Theo E M. Initial pharmacologic therapy of heart failure with reduced ejection fraction in adults. Son eriřim tarihi 11 Kasım 2019.

A6(ii): Flather MD, Shibata MC, Coats AJ, et al. Randomized trial to determine the effect of nebivolol on mortality and cardiovascular hospital admission in elderly patients with heart failure (SENIORS). Eur Heart J 2005; 26:215.

A6(iii): van Veldhuisen DJ, Cohen-Solal A, Böhm M, et al. Beta-blockade with nebivolol in elderly heart failure patients with impaired and preserved left ventricular ejection fraction: Data From SENIORS (Study of Effects of Nebivolol Intervention on Outcomes and Rehospitalization in Seniors With Heart Failure). J Am Coll Cardiol 2009; 53:2150.

A6(iv): Veldhuisen DJ. Nebivolol in chronic heart failure: current evidence and future perspectives. Expert Opin Pharmacother. 2010 Apr;11(6):983-92.

A6(v): Ponikowski P, Voors AA, Anker SD, Bueno H, Cleland JGF, Coats AJS, Falk V, González-Juanatey JR, Harjola VP, Jankowska EA, Jessup M, Linde C, Nihoyannopoulos P, Parissis JT, Pieske B, Riley JP, Rosano GMC, Ruilope LM, Ruschitzka F, Rutten FH, van der Meer P; ESC Scientific Document Group. 2016 ESC Guidelines for the diagnosis and treatment of acute and chronic heart failure: The Task Force for the diagnosis and treatment of acute and chronic heart failure of the European Society of Cardiology (ESC) Developed with the special contribution of the Heart Failure Association (HFA) of the ESC. Eur Heart J. 2016 Jul 14;37(27):2129-2200.

A6(vi): Joseph P K, Julian M A, Bernard J G. Stable ischemic heart disease: Overview of care. Son eriřim tarihi 23 Ekim 2019.

A6(vii): Smith SC Jr, Benjamin EJ, Bonow RO, Braun LT, Creager MA, Franklin BA, Gibbons RJ, Grundy SM, Hiratzka LF, Jones DW, Lloyd-Jones DM, Minissian M, Mosca L, Peterson ED, Sacco RL, Spertus J, Stein JH, Taubert KA; World Heart Federation and the Preventive Cardiovascular Nurses Association. AHA/ACCF Secondary Prevention and Risk Reduction Therapy for Patients with Coronary and other Atherosclerotic Vascular Disease: 2011 update: a guideline from the American Heart Association and American College of Cardiology Foundation. Circulation. 2011 Nov 29;124(22):2458-73.

A6(viii): O'Mahony D, O'Sullivan D, Byrne S, O'Connor MN, Ryan C, Gallagher P. STOPP/START criteria for potentially inappropriate prescribing in older people: version 2. Age Ageing. 2015 Mar;44(2):213-8.

B Santral Sinir Sistemi kriterleri.

B1. Majör depresif bozukluk varlığında antidepresan tedavi başlanması uygundur

B1(i): Lebowitz BD, Pearson JL, Schneider LS, Reynolds CF 3rd, Alexopoulos GS, Bruce ML, Conwell Y, Katz IR, Meyers BS, Morrison MF, Mossey J, Niederehe G, Parmelee P. Diagnosis and treatment of depression in late life. Consensus statement update. JAMA 1997; 278(14): 1186-90. Review.

B1(ii): Mottram P, Wilson K, Strobl J. Antidepressants for depressed elderly. Cochrane Database Syst Rev. 2006 Jan 25;(1):CD003491. Review.

B1(iii): O'Mahony D, O'Sullivan D, Byrne S, O'Connor MN, Ryan C, Gallagher P. STOPP/START criteria for potentially inappropriate prescribing in older people: version 2. Age Ageing. 2015 Mar;44(2):213-8. doi: 10.1093/ageing/afu145. Epub 2014 Oct 16. Review.

B1(iv): Charles F. Reynolds. Evidence-Based Treatment and Prevention of Major Depressive Episodes in Later Life in Hazards Geriatric Medicine and Gerontology Seventh edition. Eds. Halter J B, Ouslander J G, Studenski S, High K P, Asthana S, Ritchie C S, Supiano M A,; 2017 page1487-1503.

B2. Fonksiyonelliği (işlevselliği) etkileyen persistan, ağır şiddette anksiyete varlığında SSRİ (SSRİ kontrendike ise SNRİ veya pregabalin) tedavisi başlanması uygundur

**Anksiyete tedavisinde, SSRİ'lerden yararlanmayan veya SSRİ'leri tolere edemeyen hastalarda, eşlik eden depresyon yok ise, buspiron monoterapisi kullanılabilir.*

B2(i): Allgulander C, Hartford J, Russell J, Ball S, Erickson J, Raskin J, Rynn M. Pharmacotherapy of generalized anxiety disorder: results of duloxetine treatment from a pooled analysis of three clinical trials. Curr Med Res Opin 2007; 23(6): 1245-52.

B2(ii): National Institute for Health and Clinical Excellence. Generalized anxiety disorder and panic disorder (with or without agoraphobia) in adults. Clinical Guideline 113. 2011. <http://guidance.nice.org.uk/CG113> (son erişim tarihi 12 Kasım 2019).

B2(iii): O'Mahony D, O'Sullivan D, Byrne S, O'Connor MN, Ryan C, Gallagher P. STOPP/START criteria for potentially inappropriate prescribing in older people: version 2. Age Ageing. 2015 Mar;44(2):213-8. doi: 10.1093/ageing/afu145. Epub 2014 Oct 16. Review.

B2(iv): Bystritsky A. Pharmacotherapy for generalized anxiety disorder in adults. In: UpToDate, Post, TW (Ed), UpToDate, Waltham, MA, 2019 Son erişim tarihi 11 Kasım 2019.

B2(v): Brawman-Mintzer O, Knapp RG, Rynn M, et al. Sertraline treatment for generalized anxiety disorder: a randomized, double-blind, placebo-controlled study. J Clin Psychiatry 2006; 67:874.

B2(vi): Dahl AA, Ravindran A, Allgulander C, et al. Sertraline in generalized anxiety disorder: efficacy in treating the psychic and somatic anxiety factors. Acta Psychiatr Scand 2005; 111:429.

B2(vii): Davidson JR, Bose A, Korotzer A, Zheng H. Escitalopram in the treatment of generalized anxiety disorder: double-blind, placebo controlled, flexible-dose study. Depress Anxiety 2004; 19:234.

B2(viii): Davidson JR, Bose A, Wang Q. Safety and efficacy of escitalopram in the long-term treatment of generalized anxiety disorder. J Clin Psychiatry 2005; 66:1441.

B2(ix): Goodman WK, Bose A, Wang Q. Treatment of generalized anxiety disorder with escitalopram: pooled results from double-blind, placebo-controlled trials. J Affect Disord 2005; 87:161.

B2(x): Craske M, Bystritsky A. Approach to treating generalized anxiety disorder in adults. In: UpToDate, Post, TW (Ed), UpToDate, Waltham, MA, 2019 erişim tarihi 11 Kasım 2019

B2(xi): Baldwin DS, Anderson IM, Nutt DJ, Allgulander C, Bandelow B, den Boer JA, Christmas DM, Davies S, Fineberg N, Lidbetter N, Malizia A, McCrone P, Nabarro D, O'Neill C, Scott J, van der Wee N, Wittchen HU. Evidence-based pharmacological treatment of anxiety disorders, post-traumatic stress disorder and obsessive-compulsive disorder: a revision of the 2005 guidelines from the British Association for Psychopharmacology. J Psychopharmacol. 2014 May;28(5):403-39.

B2(xii): Lenze EJ, Rollman BL, Shear MK, Dew MA, Pollock BG, Ciliberti C, Costantino M, Snyder S, Shi P, Spitznagel E, Andreescu C, Butters MA, Reynolds CF 3rd. Escitalopram for older adults with generalized anxiety disorder: a randomized controlled trial. JAMA. 2009 Jan 21;301(3):295-303.

B2(xiii): Andreescu C, Varon D. New research on anxiety disorders in the elderly and an update on evidence-based treatments. Curr Psychiatry Rep. 2015 Jul;17(7):53.

B2(xiv): Daniel D. Sewell, Steve Koh, Jeanne Maglione, Ryan Greytak, Laura Marrone, Dilip V. Jeste. General Topics in Geriatric Psychiatry, ANXIETY DISORDERS. in Hazards Geriatric Medicine and Gerontology Seventh edition. Eds. Halter J B, Ouslander J G, Studenski S, High K P, Asthana S, Ritchie C S, Supiano M A,; 2017 pages 1532-36.

B3. Erken-orta evre Alzheimer hastalığında ChEi tedavisi başlanması uygundur

**Alzheimer hastalığında ChEi tedavisi başlanması için kanıt vardır.*

**Erken-orta evre Alzheimer hastalığında her 3 kolinesteraz inhibitörü (donepezil, galantamin, rivastigmin) için kanıt vardır ve FDA onayı mevcuttur*

**İleri evre Alzheimer hastalığında donepezil ile ilgili kanıt ve FDA onayı mevcuttur.*

**Parkinson hastalığı demansında rivastigmin başlanması için kanıt vardır ve FDA onayı mevcuttur. Parkinson hastalığı demansında donepezilin yararlı olabileceğine dair çalışmalar vardır*

**Diğer demans tiplerinden Lewy cisimcikli demans ve vasküler demansta ChEi kullanımına dair kesin kanıtlar yoktur ancak kullanılması önerilebilir.*

**Lewy cisimcikli demansta donepezil ve rivastigminin yararlı olabileceğine dair çalışmalar vardır. Lewy cisimcikli demansta FDA onayı ChEi'lerinin hiçbiri için mevcut değildir*

**Vasküler demansta kolinesteraz inhibitörlerinin yararlı olabileceğine dair çalışmalar vardır. Vasküler demansta FDA onayı ChEi'lerinin hiçbiri için mevcut değildir.*

B3(i): Raina P, Santaguida P, Ismaila A, Patterson C, Cowan D, Levine M, Booker L, Oremus M. Effectiveness of cholinesterase inhibitors and memantine for treating dementia: evidence review for a clinical practice guideline. Ann Intern Med 2008; 148(5): 379-97. Review.

B3(ii): Birks J. Cholinesterase inhibitors for Alzheimer's disease. Cochrane Database Syst Rev 2006 Jan 25;(1):CD005593. Review.

B3(iii): Rolinski M, Fox C, Maidment I, McShane R. Cholinesterase inhibitors for dementia with Lewy bodies, Parkinson's disease dementia and cognitive impairment in Parkinson's disease. Cochrane Database Syst Rev 2012 Mar 14;3:CD006504.

B3(iv): O'Mahony D, O'Sullivan D, Byrne S, O'Connor MN, Ryan C, Gallagher P. STOPP/START criteria for potentially inappropriate prescribing in older people: version 2. Age Ageing. 2015 Mar;44(2):213-8. doi: 10.1093/ageing/afu145. Epub 2014 Oct 16. Review.

B3(v): Press D, Alexander M. Cholinesterase inhibitors in the treatment of dementia. In: UpToDate, Post, TW (Ed), UpToDate, Waltham, MA, 2019 Son erişim tarihi 11 Kasım 2019.

B3(vi): Press D, Alexander M. Treatment of dementia. In: UpToDate, Post, TW (Ed), UpToDate, Waltham, MA, 2019 Son erişim tarihi 11 Kasım 2019.

B3(vii): Farlow MR. Prognosis and treatment of dementia with Lewy bodies. In: UpToDate, Post, TW (Ed), UpToDate, Waltham, MA, 2019 Son erişim tarihi 11 Kasım 2019.

B3(viii): Efficacy of rivastigmine in dementia with Lewy bodies: a randomised, double-blind, placebo-controlled international study. McKeith I, Del Ser T, Spano P, Emre M, Wesnes K, Anand R, Cicin-Sain A, Ferrara R, Spiegel R Lancet. 2000;356(9247):2031;

B3(ix): Mori E, Ikeda M, Kosaka K, Donepezil-DLB Study Investigators. Donepezil for dementia with Lewy bodies: a randomized, placebo-controlled trial. Ann Neurol 2012; 72:41.

B3(x): Ikeda M, Mori E, Matsuo K, et al. Donepezil for dementia with Lewy bodies: a randomized, placebo-controlled, confirmatory phase III trial. Alzheimers Res Ther 2015; 7:4.

B3(xi): Emre M, Aarsland D, Albanese A, et al. Rivastigmine for dementia associated with Parkinson's disease. N Engl J Med 2004; 351:2509.;

B3(xii): Dubois B, Tolosa E, Katzschlager R, Emre M, Lees AJ, Schumann G, Pourcher E, Gray J, Thomas G, Swartz J, Hsu T, Moline ML. Donepezil in Parkinson's disease dementia: a randomized, double-blind efficacy and safety study. Mov Disord. 2012 Sep 1;27(10):1230-8

B3(xiii): Malouf R, Birks J. Donepezil for vascular cognitive impairment. Cochrane Database Syst Rev. 2004;(1):CD004395. Review.

B3(xiv): Erkinjuntti T, Kurz A, Gauthier S, Bullock R, Lilienfeld S, Damaraju CV. Efficacy of galantamine in probable vascular dementia and Alzheimer's disease combined with cerebrovascular disease: a randomised trial. Lancet. 2002 Apr 13;359(9314):1283-90.

B3(xv): Auchus AP, Brashear HR, Salloway S, Korczyn AD, De Deyn PP, Gassmann-Mayer C; GAL-INT-26 Study Group. Galantamine treatment of vascular dementia: a randomized trial. Neurology. 2007 Jul 31;69(5):448-58.

B3(xvi): Birks J, McGuinness B, Craig D. Rivastigmine for vascular cognitive impairment. Cochrane Database Syst Rev. 2013 May 31;(5):CD004744. Review.

B3 (xvii): Ballard C, Sauter M, Scheltens P, He Y, Barkhof F, van Straaten EC, van der Flier WM, Hsu C, Wu S, Lane R. Efficacy, safety and tolerability of rivastigmine capsules in patients with probable vascular dementia: the VantagE study. Curr Med Res Opin. 2008 Sep;24(9):2561-74.

B3(xviii): Mok V, Wong A, Ho S, Leung T, Lam WW, Wong KS. Rivastigmine in Chinese patients with subcortical vascular dementia. Neuropsychiatr Dis Treat. 2007 Dec;3(6):943-8.

B3(xix): Narasimhalu K, Effendy S, Sim CH, Lee JM, Chen I, Hia SB, Xue HL, Corrales MP, Chang HM, Wong MC, Chen CP, Tan EK. A randomized controlled trial of rivastigmine in patients with cognitive impairment no dementia because of cerebrovascular disease. Acta Neurol Scand. 2010 Apr;121(4):217-24.

B3(xx): U.S. Food and Drug Administration. Donepezil hydrochloride: Highlights of prescribing information by FDA. Available at: https://www.accessdata.fda.gov/drugsatfda_docs/label/2012/020690s035,021720s008,022568s0051bl.pdf erişim tarihi 11 Kasım 2019.

B3(xxi): U.S. Food and Drug Administration. Rivastigmine tartrate: Highlights of prescribing information by FDA. Available at: https://www.accessdata.fda.gov/drugsatfda_docs/label/2006/020823s016,021025s0081bl.pdf erişim tarihi 11 Kasım 2019.

B3(xxii): U.S. Food and Drug Administration. Galantamine hydrobromide: Highlights of prescribing information by FDA. Available at: https://www.accessdata.fda.gov/drugsatfda_docs/label/2017/021169Orig1s032,021224Orig1s030,021615Orig1s0231bl.pdf erişim tarihi 11 Kasım 2019

B3(xxiii): Birks JS, Harvey RJ. Donepezil for dementia due to Alzheimer's disease. Cochrane Database Syst Rev. 2018 Jun 18;6:CD001190.

B3(xxiv): Birks JS, Grimley Evans J. Rivastigmine for Alzheimer's disease. Cochrane Database Syst Rev. 2015 Apr 10;(4):CD001191.

B4. Orta-ileri evre Alzheimer hastalığında memantin tedavisi başlanması uygundur

**Memantin'in vasküler demansta da etkinliği olabilir.*

**Memantin, demansın davranışsal ve psikiyatrik semptomlarında (BPSD) faydalı olabilir.*

B4(i): Memantine: Drug information, Lexicomp Online. Son erişim tarihi 22 Ekim 2019.

B4(ii): California ADS Tx guideline; Geldmacher DS. Treatment Guidelines for Alzheimer's Disease: Redefining Perceptions in Primary Care. Primary Care Companion to The Journal of Clinical Psychiatry. 2007;9(2):113-121

B4(iii): Press D, Alexander M. Treatment of dementia. In: UpToDate, Post, TW (Ed), UpToDate, Waltham, MA, 2019 Son erişim tarihi 11 Kasım 2019.

B4(iv): Reisberg B, Doody R, Stöffler A, Schmitt F, Ferris S, Möbius HJ; Memantine Study Group. Memantine in moderate-to-severe Alzheimer's disease. N Engl J Med. 2003 Apr 3;348(14):1333-41.

B4(v): Howard R, McShane R, Lindesay J, Ritchie C, Baldwin A, Barber R, Burns A, Dening T, Findlay D, Holmes C, Hughes A, Jacoby R, Jones R, Jones R, McKeith I, Macharouthu A, O'Brien J, Passmore P, Sheehan B, Juszcak E, Katona C, Hills R, Knapp M, Ballard C, Brown R, Banerjee S, Onions C, Griffin M, Adams J, Gray R, Johnson T, Bentham P, Phillips P. Donepezil and memantine for moderate-to-severe Alzheimer's disease. N Engl J Med. 2012 Mar 8;366(10):893-903.

B4(vi): Chen R, Chan PT, Chu H, Lin YC, Chang PC, Chen CY, Chou KR. Treatment effects between monotherapy of donepezil versus combination with memantine for Alzheimer disease: A meta-analysis. PLoS One. 2017 Aug 21;12(8):e0183586.

B4(vii): Orgogozo JM, Rigaud AS, Stöffler A, Möbius HJ, Forette F. Efficacy and safety of memantine in patients with mild to moderate vascular dementia: a randomized, placebo-controlled trial (MMM 300). Stroke. 2002 Jul;33(7):1834-9.

B4(viii): Wilcock G, Möbius HJ, Stöffler A; MMM 500 group. A double-blind, placebo-controlled multicentre study of memantine in mild to moderate vascular dementia (MMM500). Int Clin Psychopharmacol. 2002 Nov;17(6):297-305.

B4(ix): Guidelines for the treatment of Alzheimer's disease. NHS Foundation Trust. Review Jan 2012. Available at:

<http://www.humber.nhs.uk/Downloads/Services/Pharmacy/Guidelines/Alzheimer%20disease%20treatment%20guidelines.pdf> (erişim tarihi 11 Kasım 2019)

B4(x): McShane R, Westby MJ, Roberts E, Minakaran N, Schneider L, Farrimond LE, Maayan N, Ware J, Debarros j. Memantine for dementia. Cochrane Database of Systemic Reviews 2019, Issue 3. Art. No: CD003154.

B5. Fonksiyonelliği (işlevselliği) etkileyen esansiyel tremoru olan hastalara propranolol veya pirimidon tedavisi başlanması uygundur

**Pirimidon'un FDA onayı yoktur.*

**Pirimidon yan etkileri (sedasyon, vertigo ve bulantı) yaygındır. Kullanıldığında düşük dozda başlanıp yavaş doz artırımını yapılmalıdır.*

B5(i): Zesiewicz TA, Evidence-based guideline update: treatment of essential tremor: report of the Quality Standards subcommittee of the American Academy of Neurology. Neurology. 2011 Nov 8;77(19):1752-5.

B5(ii): Reich SG. Essential Tremor. Med Clin North Am. 2019 Mar;103(2):351-356. doi: 10.1016/j.mcna.2018.10.016. Review.

B5(iii): Haubenberger D, Hallett M. Essential Tremor. N Engl J Med. 2018 May 10;378(19):1802-1810. doi: 10.1056/NEJMcp1707928. Review.

B5(iv): Primidone: Drug information, Lexicomp online. Son erişim tarihi 12 Kasım 2019.

B6. Fonksiyonel (işlevsel) bozukluk ve dizabiliteye sebep olan idiyopatik Parkinson hastalığı varlığında L-dopa tedavisi başlanması uygundur

B6(i): Marjama-Lyons JM, Koller WC. Parkinson's disease. Update in diagnosis and symptom management. *Geriatrics* 2001; 56(8): 24-5, 29-30, 33-5. Review.

B6(ii): Danisi F. Parkinson's disease. Therapeutic strategies to improve patient function and quality of life. *Geriatrics* 2002; 57(3): 46-50; quiz 52. Review.

B6(iii): O'Mahony D, O'Sullivan D, Byrne S, O'Connor MN, Ryan C, Gallagher P. STOPP/START criteria for potentially inappropriate prescribing in older people: version 2. *Age Ageing*. 2015 Mar;44(2):213-8. doi: 10.1093/ageing/afu145. Epub 2014 Oct 16. Review.

B6(iv): Ferreira JJ, Summary of the recommendations of the EFNS/MDS-ES review on therapeutic management of Parkinson's disease. *Eur J Neurol*. 2013 Jan;20(1):5-15

B6(v): Spindler MA, Tarsy D. Initial pharmacologic treatment of Parkinson disease. In: UpToDate, Post, TW (Ed), UpToDate, Waltham, MA, 2019 Son erişim tarihi 12 Kasım 2019.

B6(vi): Kotagal V, Bohnen NI. Parkinson Disease and Related Disorders in Hazzards Geriatric Medicine and Gerontology Seventh edition. Eds. Halter J B, Ouslander J G, Studenski S, High K P, Asthana S, Ritchie C S, Supiano M A,; 2017. Pages 1422-28.

B6(vii): Connolly BS, Lang AE. Pharmacological treatment of Parkinson disease: a review. *JAMA*. 2014 Apr 23-30;311(16):1670-83. doi: 10.1001/jama.2014.3654. Review.

B7. İdiyopatik Parkinson hastalarında açık-kapalı motor dalgalanmalar başladığında, L-dopa tedavisine MAO-B inhibitörü veya COMT inhibitörü eklenmesi uygundur

B7(i): Ferreira JJ, Summary of the recommendations of the EFNS/MDS-ES review on therapeutic management of Parkinson's disease. *Eur J Neurol*. 2013 Jan;20(1):5-15.

B7(ii): Kotagal V, Bohnen NI. Parkinson Disease and Related Disorders in Hazzards Geriatric Medicine and Gerontology Seventh edition. Eds. Halter J B, Ouslander J G, Studenski S, High K P, Asthana S, Ritchie C S, Supiano M A; 2017. Pages 1428-30.

B7(iii): Connolly BS, Lang AE. Pharmacological treatment of Parkinson disease: a review. *JAMA*. 2014 Apr 23-30;311(16):1670-83. doi: 10.1001/jama.2014.3654. Review.

B8. Demir eksikliği ve kronik böbrek yetersizliğinin dışlandığı huzursuz bacak sendromu olan hastalarda, semptomlar yaşam kalitesini olumsuz etkiliyorsa, alfa-2-delta kalsiyum kanal blokerleri (pregabalin, gabapentin) veya dopamin agonistleri (pramipeksol/ropinirol/rotigotin) başlanması uygundur

**L-dopa tedavisi (50-200 mg), özellikle intermitan semptomu olan olgularda uygun olabilir. Böbrek yetersizliği olan semptomatik olgularda da tercih edilebilir.*

B8(i): Zintzaras E, Kitsios GD, Papathanasiou AA, Konitsiotis S, Miligkos M, Rodopoulou P, Hadjigeorgiou GM. Randomized trials of dopamine agonists in restless legs syndrome: a systematic review, quality assessment, and meta-analysis. *Clin Ther* 2010; 32(2): 221-37. Review.

B8(ii): Hansen RA, Song L, Moore CG, Gilsean AW, Kim MM, Calloway MO, Murray MD. Effect of ropinirole on sleep outcomes in patients with restless legs syndrome: meta-analysis of pooled individual patient data from randomized controlled trials. *Pharmacotherapy* 2009; 29(3): 255-62.

B8(iii): Scholz H, Trenkwalder C, Kohnen R, Riemann D, Kriston L, Hornyak M. Dopamine agonists for restless legs syndrome. *Cochrane Database Syst Rev.* 2011 Mar 16;(3):CD006009. doi: 10.1002/14651858.CD006009.pub2. Review.

B8(iv): Garcia-Borreguero D, Stillman P, Benes H, Buschmann H, Chaudhuri KR, Gonzalez Rodríguez VM, Högl B, Kohnen R, Monti GC, Stiasny-Kolster K, Trenkwalder C, Williams AM, Zucconi M. Algorithms for the diagnosis and treatment of restless legs syndrome in primary care. *BMC Neurol.* 2011 Feb 27;11:28

B8(v): O'Mahony D, O'Sullivan D, Byrne S, O'Connor MN, Ryan C, Gallagher P. STOPP/START criteria for potentially inappropriate prescribing in older people: version 2. *Age Ageing.* 2015 Mar;44(2):213-8. doi: 10.1093/ageing/afu145. Epub 2014 Oct 16. Review.

B8(vi): Silber MH. Treatment of restless legs syndrome and periodic limb movement disorder in adults. In: UpToDate, Post, TW (Ed), UpToDate, Waltham, MA, 2019 erişim tarihi 11 Kasım 2019

B8(vii): Trenkwalder C, Stiasny K, Pollmächer T, Wetter T, Schwarz J, Kohnen R, Kazenwadel J, Krüger HP, Ramm S, Künzel M, et al. L-dopa therapy of uremic and idiopathic restless legs syndrome: a double-blind, crossover trial. *Sleep.* 1995Oct;18(8):681-8.

B8(viii): Garcia-Borreguero D, Silber MH, Winkelmann JW, Högl B, Bainbridge J, Buchfuhrer M, Hadjigeorgiou G, Inoue Y, Manconi M, Oertel W, Ondo W, Winkelmann J, Allen RP. Guidelines for the first-line treatment of restless legs syndrome/Willis-Ekbom disease, prevention and treatment of dopaminergic augmentation: a combined task force of the IRLSSG, EURLSSG, and the RLS-foundation. *Sleep Med.* 2016 May;21:1-11.

B8(ix): Winkelmann JW, Armstrong MJ, Allen RP, Chaudhuri KR, Ondo W, Trenkwalder C, Zee PC, Gronseth GS, Gloss D, Zesiewicz T. Practice guideline summary: Treatment of restless legs syndrome in adults: Report of the Guideline Development, Dissemination, and Implementation Subcommittee of the American Academy of Neurology. *Neurology.* 2016 Dec 13;87(24):2585-2593.

C: Gastrointestinal Sistem kriterleri.

C1. Yaşam tarzı değişikliklerine (diyet-egzersiz) yanıtız semptomatik konstipasyonu olan olgularda, fekal tıkaç dışlanarak, lif desteği (psilyum, metilselüloz, polikarbofil, buğday dekstrin) veya polietilenglikol başlanması uygundur

C1(i): Rao SSC. Constipation in the older adult. In: UpToDate, Post, TW (Ed), UpToDate, Waltham, MA, 2019 Son erişim tarihi 11 Kasım 2019

C1(ii): O'Mahony D, O'Sullivan D, Byrne S, O'Connor MN, Ryan C, Gallagher P. STOPP/START criteria for potentially inappropriate prescribing in older people: version 2. *Age Ageing.* 2015 Mar;44(2):213-8. doi: 10.1093/ageing/afu145. Epub 2014 Oct 16. Review.

C1(iii): Emmanuel A, Mattace-Raso F, Neri MC, Petersen KU, Rey E, Rogers J. Constipation in older people: A consensus statement. *Int J Clin Pract.* 2017Jan;71(1).

C1(iv): Bharucha AE, Pemberton JH, Locke GR 3rd. American Gastroenterological Association technical review on constipation. *Gastroenterology.* 2013Jan;144(1):218-38. doi:10.1053/j.gastro.2012.10.028. Review.

D: Solunum Sistemi kriterleri.

D1. Hafif-orta astım veya KOAH'ı olan hastalarda düzenli inhale beta2 agonist veya antikolinerjik tedavi başlanması uygundur

D1(i): Pauwels RA, Buist AS, Ma P, Jenkins CR, Hurd SS; GOLD Scientific Committee. Global strategy for the diagnosis, management, and prevention of chronic obstructive pulmonary disease: National Heart, Lung, and Blood Institute and World Health Organization Global Initiative for Chronic Obstructive Lung Disease (GOLD): executive summary. *Respir Care* 2001; 46(8): 798-825. Review.

D1(ii): Keating GM. Tiotropium bromide inhalation powder: a review of its use in the management of chronic obstructive pulmonary disease. *Drugs* 2012; 72(2):273-300. Review.

D1(iii): Yohannes AM, Hardy CC. Treatment of chronic obstructive pulmonary disease in older patients: a practical guide. *Drugs Aging* 2003; 20(3): 209-28. Review.

D1(iv): McCrory DC, Brown CD. Anti-cholinergic bronchodilators versus beta2-sympathomimetic agents for acute exacerbations of chronic obstructive pulmonary disease. *Cochrane Database Syst Rev*. 2002;(4):CD003900. Review.

D1(v): O'Mahony D, O'Sullivan D, Byrne S, O'Connor MN, Ryan C, Gallagher P. STOPP/START criteria for potentially inappropriate prescribing in older people: version 2. *Age Ageing*. 2015 Mar;44(2):213-8. doi: 10.1093/ageing/afu145. Epub 2014 Oct 16. Review.

D1(vi): Global Initiative For Chronic Obstructive Lung Disease. Global Strategy for the Diagnosis, Management, and Prevention of Chronic Obstructive Pulmonary Disease. 2018 Report. Available at: https://goldcopd.org/wp-content/uploads/2017/11/GOLD-2018-v6.0-FINAL-revised-20-Nov_WMS.pdf son erişim tarihi 23 October 2019.

D1(vii): Anderson GP. Current issues with beta2-adrenoceptor agonists: pharmacology and molecular and cellular mechanisms. *Clin Rev Allergy Immunol*. 2006 Oct-Dec;31(2-3): 119-30.

D2. FEV1 < %50 olan ve oral steroid tedavisi gerektiren tekrarlayan alevlenmeleri olan orta-ağır astım veya KOAH hastalarında düzenli inhale kortikosteroid tedavisi başlanması uygundur

D2(i): Global Initiative For Chronic Obstructive Lung Disease. Global Strategy for the Diagnosis, Management, and Prevention of Chronic Obstructive Pulmonary Disease. 2018 Report. Available at: https://goldcopd.org/wp-content/uploads/2017/11/GOLD-2018-v6.0-FINAL-revised-20-Nov_WMS.pdf Son erişim tarihi 23 Ekim 2019.

D2(ii): O'Mahony D, O'Sullivan D, Byrne S, O'Connor MN, Ryan C, Gallagher P. STOPP/START criteria for potentially inappropriate prescribing in older people: version 2. *Age Ageing*. 2015 Mar;44(2):213-8. doi: 10.1093/ageing/afu145. Epub 2014 Oct 16. Review.

D3. Kronik hipoksemisi (pO₂ ≤ 55 mmHg veya SO₂ ≤ %88) olan hastalarda evde sürekli oksijen tedavisi başlanması uygundur

D3(i): Tjep BL, Carter R. Long-term supplemental oxygen therapy. In: UpToDate, Post, TW (Ed), UpToDate, Waltham, MA, 2019 erişim tarihi 11 Kasım 2019

D3(ii): O'Mahony D, O'Sullivan D, Byrne S, O'Connor MN, Ryan C, Gallagher P. STOPP/START criteria for potentially inappropriate prescribing in older people: version 2. *Age Ageing*. 2015 Mar;44(2):213-8. Doi: 10.1093/ageing/afu145. Epub 2014 Oct 16. Review.

D3(iii): Croxton TL, Bailey WC. Long-term oxygen treatment in chronic obstructive pulmonary disease: recommendations for future research: an NHLBI workshop report. *Am J Respir Crit Care Med* 2006; 174:373.

D3(iv): Sjöberg F, Singer M. The medical use of oxygen: a time for critical reappraisal. *J Intern Med* 2013; 274:505.

D3(v): Global Initiative For Chronic Obstructive Lung Disease. Global Strategy 14ort he Diagnosis, Management, and Prevention of Chronic Obstructive Pulmonary Disease.2018 Report. Available at: https://goldcopd.org/wp-content/uploads/2017/11/GOLD-2018-v6.0-FINAL-revised-20-Nov_WMS.pdf Son erişim tarihi 23 Ekim 2019.

E: Kas İskelet Sistemi kriterleri ve Analjezik İlaçlar.

E1. Günlük diyetle vitamin D alımı <800-1000 İÜ veya elementer kalsiyum alımı <1000-1200 mg olan hastalarda replasman tedavisinin başlanması uygundur

E1(i): Cosman F, de Beur SJ, LeBoff MS, Lewiecki EM, Tanner B, Randall S, Lindsay R; National Osteoporosis Foundation. Clinician's Guide to Prevention and Treatment of Osteoporosis. Osteoporos Int. 2014 Oct;25(10):2359-81. doi:10.1007/s00198-014-2794-2. Epub 2014 Aug 15. Erratum in: Osteoporos Int. 2015 Jul;26(7):2045-7.

E1(ii): Rosen HN. Calcium and vitamin D supplementation in osteoporosis. In: UpToDate, Post, TW (Ed), UpToDate, Waltham, MA, 2019 Son erişim tarihi 11 Kasım 2019.

E1(iii): O'Mahony D, O'Sullivan D, Byrne S, O'Connor MN, Ryan C, Gallagher P. STOPP/START criteria for potentially inappropriate prescribing in older people: version 2. Age Ageing. 2015 Mar;44(2):213-8. doi: 10.1093/ageing/afu145. Epub 2014 Oct 16. Review.

E1(iv): Camacho PM, Petak SM, Binkley N, Clarke BL, Harris ST, Hurley DL, Kleerekoper M, Lewiecki EM, Miller PD, Narula HS, Pessah-Pollack R, Tangpricha V, WimalawansaSJ, Watts NB. American Association Of Clinical Endocrinologists And Americancollege of Endocrinology Clinical Practice Guidelines for the Diagnosis and Treatment of Postmenopausal Osteoporosis - 2016. Endocr Pract. 2016 Sep;22(Suppl 4):1-42.

E1(v): Heflin MT. Geriatric health maintenance. In: UpToDate, Post, TW (Ed), UpToDate, Waltham, MA, 2019 Son erişim tarihi 11 Kasım 2019.

E1(vi): Stephen R. Lord. Falls.in Hazzards Geriatric Medicine and Gerontology Seventh edition. Eds. Halter J B, Ouslander J G, Studenski S, High K P, Asthana S, Ritchie C S, Supiano M A,; 2017 pages 1032-42.

E1(vii): Dennis H. Sullivan, Larry E. Johnson. Nutrition and Obesityin Hazzards Geriatric Medicine and Gerontology Seventh edition. Eds. Halter J B, Ouslander J G, Studenski S, High K P, Asthana S, Ritchie C S, Supiano M A,; 2017 page 723-24.

E2. Dökümante osteoporozu olan [frajilite fraktürü ve/veya kemik mineral dansitometri T skoru (femur total, femur boyun veya lomber $\leq -2,5$)] hastalarda anti-rezorptif (bifosfonat, denosumab) veya anabolik ajan (parathormon analogu) başlanması uygundur

**Tedavi aynı zamanda yeterli D vitamini ve elementer kalsiyum alımını da içermelidir.*

E2(i): Cosman F, de Beur SJ, LeBoff MS, Lewiecki EM, Tanner B, Randall S, Lindsay R; National Osteoporosis Foundation. Clinician's Guide to Prevention and Treatment of Osteoporosis.Osteoporos Int. 2014 Oct;25(10):2359-81. doi: 10.1007/s00198-014-2794-2. Epub 2014 Aug 15. Erratum in: Osteoporos Int. 2015 Jul;26(7):2045-7.

E2(ii): O'Donnell S, Cranney A, Wells GA, Adachi JD, Reginster JY. Strontium ranelate for preventing and treating postmenopausal osteoporosis. Cochrane Database Syst Rev. 2006 Jul 19;(3):CD005326. Review. Update in: Cochrane Database Syst Rev.2006;(4):CD005326.

E2(iii): Rosen HN, Drezner MK. Overview of the management of osteoporosis in postmenopausal women. In: UpToDate, Post, TW (Ed), UpToDate, Waltham, MA, 2019 Son erişim tarihi 11 Kasım 2019.

E2(iv): O'Mahony D, O'Sullivan D, Byrne S, O'Connor MN, Ryan C, Gallagher P. STOPP/START criteria for potentially inappropriate prescribing in older people: version 2. Age Ageing. 2015 Mar;44(2):213-8. doi: 10.1093/ageing/afu145. Epub 2014 Oct 16. Review.

E2(v): Camacho PM, Petak SM, Binkley N, Clarke BL, Harris ST, Hurley DL, Kleerekoper M, Lewiecki EM, Miller PD, Narula HS, Pessah-Pollack R, Tangpricha V, WimalawansaSJ, Watts NB. American Association of Clinical Endocrinologists and American College of Endocrinology Clinical Practice Guidelines for the Diagnosis and Treatment of Postmenopausal Osteoporosis - 2016. Endocr Pract. 2016 Sep;22(Suppl 4):1-42.

E2(vi): Eastell R, Rosen CJ, Black DM, Cheung AM, Murad MH, Shoback D. Pharmacological Management of Osteoporosis in Postmenopausal Women: An Endocrine Society*Clinical Practice Guideline. J Clin Endocrinol Metab. 2019 May 1;104(5):1595-1622.

E3. Uzun süreli (beklenen süre ≥ 3 ay) sistemik kortikosteroid tedavisi başlanan hastalarda: i) $\geq 7,5$ mg/gün prednizolon veya eşdeğer steroid tedavisi alacaklarda, ii) eğer T skoru < -1 ise dozdan bağımsız steroid tedavisi alacak tüm hastalarda, bifosfonat tedavisi başlanması uygundur

** ≥ 70 yaş olgularda, dozdan bağımsız uzun süreli (>3 ay) steroid tedavisi alacak tüm hastalara da, bifosfonat tedavisi başlanması uygun olabilir.*

**Tedavi aynı zamanda yeterli D vitamini ve temel kalsiyum alımını da içermelidir.*

E3(i): Homik J, Suarez-Almazor ME, Shea B, Cranney A, Wells G, Tugwell P. Calcium and vitamin D for corticosteroid-induced osteoporosis. Cochrane Database Syst Rev 2000; (2): CD000952. Review.

E3(ii): Iwamoto J, Takeda T, Sato Y. Effects of antifracture drugs in postmenopausal, male and glucocorticoid-induced osteoporosis--usefulness of alendronate and risedronate. Expert Opin Pharmacother 2007; 8(16): 2743-56. Review.

E3(iii): Glucocorticoid Induced Osteoporosis. Osteoporosis and metabolic bone disease diagnosis and treatment guidelines of the Society of Endocrinology and Metabolism of Turkey • 2018. Page 59-61. Available at: http://www.temd.org.tr/admin/uploads/tbl_gruplar/20180517113533-2018-05-17tbl_gruplar113531.pdf erişim tarihi 11 Kasım 2019. (Türkçe)

E3(iv): Allen CS, Yeung JH, Vandermeer B, Homik J. Bisphosphonates for steroid-induced osteoporosis. Cochrane Database Syst Rev. 2016 Oct 5;10:CD001347. Review.

E3(v): Rosen HN, Saag KG. Prevention and treatment of glucocorticoid-induced osteoporosis. In: UpToDate, Post, TW (Ed), UpToDate, Waltham, MA, 2019 Son erişim tarihi 11 Kasım 2019.

E3(vi): O'Mahony D, O'Sullivan D, Byrne S, O'Connor MN, Ryan C, Gallagher P. STOPP/START criteria for potentially inappropriate prescribing in older people: version 2. Age Ageing. 2015 Mar;44(2):213-8. doi: 10.1093/ageing/afu145. Epub 2014 Oct 16. Review.

E3(vii): Compston J, Cooper A, Cooper C, Gittoes N, Gregson C, Harvey N, Hope S, Kanis JA, McCloskey EV, Poole KES, Reid DM, Selby P, Thompson F, Thurston A, Vine N; National Osteoporosis Guideline Group (NOGG). UK clinical guideline for the prevention and treatment of osteoporosis. Arch Osteoporos. 2017 Dec;12(1):43.

E3(viii): Lekamwasam S, Adachi JD, Agnusdei D, Bilezikian J, Boonen S, Borgström F, Cooper C, Diez Perez A, Eastell R, Hofbauer LC, Kanis JA, Langdahl BL, Lesnyak O, Lorenc R, McCloskey E, Messina OD, Napoli N, Obermayer-Pietsch B, Ralston SH, Sambrook PN, Silverman S, Sosa M, Stepan J, Suppan G, Wahl DA, Compston JE; Joint IOF-ECTS GIO Guidelines Working Group. A framework for the

development of guidelines for the management of glucocorticoid-induced osteoporosis. Osteoporos Int. 2012 Sep;23(9):2257-76.

E4. Denosumab tedavisi sonrası uzun etkili antirezorbtif tedavi başlanması uygundur (denosumab kesilmesini takiben rebound BTM'lerde artış, BMD kaybı ve vertebral fraktür riskinde artış olur)

** Rebound etki iki dozdan sonra denosumab tedavisi kesilen olgularda daha belirgindir.*

E4(i): Eastell R, Rosen CJ, Black DM, Cheung AM, Murad MH, Shoback D. Pharmacological Management of Osteoporosis in Postmenopausal Women: An Endocrine Society* Clinical Practice Guideline. J Clin Endocrinol Metab. 2019 May 1;104(5):1595-1622.

E4(ii): Tsourdi E et al. Discontinuation of denosumab therapy for osteoporosis: a systematic review and position statement by ECTS. Bone 2017;105:11–17.

E4(iii): Horne AM, Mihov B, Reid IR. Bone loss after romosozumab/denosumab: effects of bisphosphonates. Calcif Tissue Int 2018;103:55–61.

E4(iv): Reid IR, Horne AM, Mihov B, Gamble GD. Bone loss after denosumab: only partial protection with zoledronate. Calcif Tissue Int . 2017;101:371–374.

E5. Teriparatid tedavisi sonrası antirezorbtif tedavi başlanması uygundur

E5(i): Camacho PM, Petak SM, Binkley N, Clarke BL, Harris ST, Hurley DL, Kleerekoper M, Lewiecki EM, Miller PD, Narula HS, Pessah-Pollack R, Tangpricha V, Wimalawansa SJ, Watts NB. American Association Of Clinical Endocrinologists and American College of Endocrinology Clinical Practice Guidelines for the Diagnosis and Treatment of Postmenopausal Osteoporosis - 2016. Endocr Pract. 2016 Sep 2;22(Suppl 4):1-42.

E5(ii): Meier C, Uebelhart B, Aubry-Rozier B, Birkhäuser M, Bischoff-Ferrari HA, Frey D, Kressig RW, Lamy O, Lippuner K, Stute P, Suhm N, Ferrari S. Osteoporosis drug treatment: duration and management after discontinuation. A position statement from the SVGO/ASCO. Swiss Med Wkly. 2017 Aug 16;147:w14484.

E5(iii): Eastell R, Rosen CJ, Black DM, Cheung AM, Murad MH, Shoback D. Pharmacological Management of Osteoporosis in Postmenopausal Women: An Endocrine Society* Clinical Practice Guideline. J Clin Endocrinol Metab. 2019 May 1;104(5):1595-1622

E6. Kronik aktif romatolojik hastalık varlığında hastalığı modifiye edici tedavi başlanması uygundur

E6(i): Saag KG, Teng GG, Patkar NM, Anuntiyo J, Finney C, Curtis JR, Paulus HE, Mudano A, Pisu M, Elkins-Melton M, Outman R, Allison JJ, Suarez-Almazor M, Bridges SL Jr, Chatham WW, Hochberg M, MacLean C, Mikuls T, Moreland LW, O'Dell J, Turkiewicz AM, Furst DE; American College of Rheumatology. American College of Rheumatology 2008 recommendations for the use of nonbiologic and biologic disease-modifying antirheumatic drugs in rheumatoid arthritis. Arthritis Rheum 2008; 59(6): 762-84.

E6(ii): Köller MD, Aletaha D, Funovits J, Pangan A, Baker D, Smolen JS. Response of elderly patients with rheumatoid arthritis to methotrexate or TNF inhibitors compared with younger patients. Rheumatology (Oxford) 2009; 48(12): 1575-80.

E6(iii): Fleischmann R, Baumgartner SW, Weisman MH, Liu T, White B, Peloso P. Long term safety of etanercept in elderly subjects with rheumatic diseases. *Ann Rheum Dis* 2006; 65(3): 379-84.

E6(iv): O'Mahony D, O'Sullivan D, Byrne S, O'Connor MN, Ryan C, Gallagher P. STOPP/START criteria for potentially inappropriate prescribing in older people: version 2. *Age Ageing*. 2015 Mar;44(2):213-8. doi: 10.1093/ageing/afu145. Epub 2014 Oct 16. Review.

E6(v): Smolen JS, Landewé R, Bijlsma J, Burmester G, Chatzidionysiou K, Dougados M, Nam J, Ramiro S, Voshaar M, van Vollenhoven R, Aletaha D, Aringer M, Boers M, Buckley CD, Buttgerit F, Bykerk V, Cardiel M, Combe B, Cutolo M, van Eijk-Hustings Y, Emery P, Finckh A, Gabay C, Gomez-Reino J, Gossec L, Gottenberg JE, Hazes JMW, Huizinga T, Jani M, Karateev D, Kouloumas M, Kvien T, Li Z, Mariette X, McInnes I, Mysler E, Nash P, Pavelka K, Poór G, Richez C, van Riel P, Rubbert-Roth A, Saag K, da Silva J, Stamm T, Takeuchi T, Westhovens R, de Wit M, van der Heijde D. EULAR recommendations for the management of rheumatoid arthritis with synthetic and biological disease-modifying antirheumatic drugs: 2016 update. *Ann Rheum Dis*. 2017 Jun;76(6):960-977. doi: 10.1136/annrheumdis-2016-210715. Epub 2017 Mar 6. Review.

E7. Metotreksat alan hastalarda folik asit desteği başlanması uygundur

E7(i): Visser K, Katchamart W, Loza E, Martinez-Lopez JA, Salliot C, Trudeau J, Bombardier C, Carmona L, van der Heijde D, Bijlsma JW, Boumpas DT, Canhao H, Edwards CJ, Hamuryudan V, Kvien TK, Leeb BF, Martín-Mola EM, Mielants H, Müller-Ladner U, Murphy G, Østergaard M, Pereira IA, Ramos-Remus C, Valentini G, Zochling J, Dougados M. Multinational evidence-based recommendations for the use of methotrexate in rheumatic disorders with a focus on rheumatoid arthritis: integrating systematic literature research and expert opinion of a broad international panel of rheumatologists in the 3E Initiative. *Ann Rheum Dis* 2009; 68(7): 1086-93.

E7(ii): Ortiz Z, Shea B, Suarez Almazor M, Moher D, Wells G, Tugwell P. Folic acid and folinic acid for reducing side effects in patients receiving methotrexate for rheumatoid arthritis. *Cochrane Database Syst Rev* 2000; (2):CD000951. Review.

E7(iii): O'Mahony D, O'Sullivan D, Byrne S, O'Connor MN, Ryan C, Gallagher P. STOPP/START criteria for potentially inappropriate prescribing in older people: version 2. *Age Ageing*. 2015 Mar;44(2):213-8. doi: 10.1093/ageing/afu145. Epub 2014 Oct 16. Review.

E7(iv): Shea, B., Swinden, M. V., Ghogomu, E. T., Ortiz, Z., Katchamart, W., Rader, T., ... & Tugwell, P. (2014). Folic acid and folinic acid for reducing side effects in patients receiving methotrexate for rheumatoid arthritis. *The Journal of rheumatology*, 41(6), 1049-1060.

E7(v): British National Formulary vol. 76, September 2018-March 2019: p 993, 888-89.

E7(vi): Smolen JS, Landewé R, Bijlsma J, Burmester G, Chatzidionysiou K, Dougados M, Nam J, Ramiro S, Voshaar M, van Vollenhoven R, Aletaha D, Aringer M, Boers M, Buckley CD, Buttgerit F, Bykerk V, Cardiel M, Combe B, Cutolo M, van Eijk-Hustings Y, Emery P, Finckh A, Gabay C, Gomez-Reino J, Gossec L, Gottenberg JE, Hazes JMW, Huizinga T, Jani M, Karateev D, Kouloumas M, Kvien T, Li Z, Mariette X, McInnes I, Mysler E, Nash P, Pavelka K, Poór G, Richez C, van Riel P, Rubbert-Roth A, Saag K, da Silva J, Stamm T, Takeuchi T, Westhovens R, de Wit M, van der Heijde D. EULAR recommendations for the management of rheumatoid arthritis with synthetic and biological disease-modifying antirheumatic drugs: 2016 update. *Ann Rheum Dis*. 2017 Jun;76(6):960-977. doi:10.1136/annrheumdis-2016-210715. Epub 2017 Mar 6. Review.

E8. Tekrarlayan gut atağı olan hastalarda ksantin oksidaz inhibitörü (öncelikle allopürinol) başlanması uygundur

E8(i): Fravel MA, Ernst ME. Management of gout in the older adult. Am J Geriatr Pharmacother 2011; 9(5): 271-85. Review.

E8(ii): Zhang W, Doherty M, Bardin T, Pascual E, Barskova V, Conaghan P, Gerster J, Jacobs J, Leeb B, Lioté F, McCarthy G, Netter P, Nuki G, Perez-Ruiz F, Pignone A, Pimentão J, Punzi L, Roddy E, Uhlig T, Zimmermann-Görska I; EULAR Standing Committee for International Clinical Studies Including Therapeutics. EULAR evidence based recommendations for gout. Part II: Management. Report of a task force of the EULAR Standing Committee for International Clinical Studies Including Therapeutics (ESCISIT). Ann Rheum Dis. 2006; 65(10): 1312-24. Review.

E8(iii): Tayar JH, Lopez-Olivo MA, Suarez-Almazor ME. Febuxostat for treating chronic gout. Cochrane Database Syst Rev. 2012 Nov 14;11:CD008653. Review.

E8(iv): O'Mahony D, O'Sullivan D, Byrne S, O'Connor MN, Ryan C, Gallagher P. STOPP/START criteria for potentially inappropriate prescribing in older people: version 2. Age Ageing. 2015 Mar;44(2):213-8. doi: 10.1093/ageing/afu145. Epub 2014 Oct 16. Review.

E8(v): British National Formulary vol. 76, September 2018-March 2019: p 1085-87.

E8(vi): Richette P, Doherty M, Pascual E, Barskova V, Becce F, Castañeda-Sanabria J, Coyfish M, Guillo S, Jansen TL, Janssens H, Lioté F, Mallen C, Nuki G, Perez-Ruiz F, Pimentao J, Punzi L, Pywell T, So A, Tausche AK, Uhlig T, Zavada J, Zhang W, Tubach F, Bardin T. 2016 updated EULAR evidence-based recommendations for the management of gout. Ann Rheum Dis. 2017 Jan;76(1):29-42. doi:10.1136/annrheumdis-2016-209707. Epub 2016 Jul 25. Review.

E9. Orta-ağır düzeydeki ağrı tedavisinde diğer analjeziklerin (parasetamol, NSAİİ veya hafif opioidler) yeterli olmadığı durumlarda güçlü etkili opioid tedavisi başlanması uygundur

E9(i): Papaleontiou M, Henderson CR Jr, Turner BJ, Moore AA, Olkhovskaya Y, Amanfo L, Reid MC. Outcomes associated with opioid use in the treatment of chronic non-cancer pain in older adults: a systematic review and meta-analysis. J Am Geriatr Soc 2010; 58(7): 1353-69. Review.

E9(ii): van Ojik AL, Jansen PA, Brouwers JR, van Roon EN. Treatment of chronic pain in older people: evidence-based choice of strong-acting opioids. Drugs Aging 2012; 29(8): 615-25. Review.

E9(iii): O'Mahony D, O'Sullivan D, Byrne S, O'Connor MN, Ryan C, Gallagher P. STOPP/START criteria for potentially inappropriate prescribing in older people: version 2. Age Ageing. 2015 Mar;44(2):213-8. doi: 10.1093/ageing/afu145. Epub 2014 Oct 16. Review.

E9(iv): Guerriero F. Guidance on opioids prescribing for the management of persistent non-cancer pain in older adults. World J Clin Cases. 2017 Mar 16;5(3):73-81.

E9(v): Bruce A. Ferrell. Pain Management in Hazards Geriatric Medicine and Gerontology Seventh edition. Eds. Halter J B, Ouslander J G, Studenski S, High K P, Asthana S, Ritchie C S, Supiano M A.; 2017.

E10. Kronik ağrılı olan ve uzun etkili opioid kullanan hastalarda, kaçak ağrı varlığında (breakthrough pain: aralıklarla gelen şiddetli ağrılar) tedaviye kısa etkili opioidlerin eklenmesi uygundur (şiddetli ağrının kontrol edilememesi riski)

E10(i): Portenoy RK, Mehta Z, Ahmed E. Cancer pain management with opioids: Optimizing analgesia. In: UpToDate, Post, TW (Ed), UpToDate, Waltham, MA, 2019 Son erişim tarihi 11 Kasım 2019.

E10(ii): O'Mahony D, O'Sullivan D, Byrne S, O'Connor MN, Ryan C, Gallagher P. STOPP/START criteria for potentially inappropriate prescribing in older people: version 2. Age Ageing. 2015 Mar;44(2):213-8. doi: 10.1093/ageing/afu145. Epub 2014 Oct 16. Review.

E10(iii): John G. Cagle, Eric W. Widera. Geriatrics and Palliative Care in Current Diagnosis and Treatment: Geriatrics Second edition. Eds. Brie Williams, Anna Chang, C. Seth Landefeld, Cyrus Ahalt, Rebecca Conant, Helen Chen.; 2014 page 65.

E10(iv): Bruce A. Ferrell. Pain Management in Hazards Geriatric Medicine and Gerontology Seventh edition. Eds. Halter J B, Ouslander J G, Studenski S, High K P, Asthana S, Ritchie C S, Supiano M A,; 2017 page 1204-1211.

F: Endokrin Sistem kriterleri.

F1. Diabetes mellitus'lu hastalarda aşikar proteinüri (>300 mg/gün) veya mikroalbuminüri (>30 mg/gün) varlığında, ACEi veya ARB tedavisi başlanması uygundur

**Böbrek yetersizliği olan olgularda ACEi veya ARB tedavisinin başlangıç döneminde serum kreatinin düzeyinde artış beklenir.*

**Bu artış %30'dan az ise tedaviye devam edilmesi önerilir.*

**ACEi veya ARB başlanması açısından mutlak kontrendike bir bazal kreatinin düzeyi olmamakla birlikte serum kreatinin düzeyi >3,0 mg/dl olan hastalarda başlanmaması önerilebilir.*

**Diabetes mellitus'lu hastalarda ACEİ-ARB tedavisi başlangıcından sonraki 1-2 hafta içinde, her doz artışında ve en az yılda 1 defa serum kreatinin ve potasyum düzeyi monitörize edilmelidir (hiperpotasemi ve renal bozulma riski)*

F1(i): Schmidt M, Mansfield KE, Bhaskaran K, Nitsch D, Sørensen HT, Smeeth L, Tomlinson LA. Serum creatinine elevation after renin-angiotensin system blockade and long term cardiorenal risks: cohort study. BMJ. 2017 Mar 9;356:j791.

F1(ii): Bakris GL, Weir MR. Angiotensin-converting enzyme inhibitor-associated elevations in serum creatinine: is this a cause for concern? Arch Intern Med. 2000 Mar 13;160(5):685-93.

F1(iii): Bicket DP. Using ACE inhibitors appropriately. Am Fam Physician. 2002 Aug 1;66(3):461-8. Review.

G: Ürogenital Sistem kriterleri.

G1. Prostatektominin endike olmadığı, orta-ağır (IPSS skoru) düzeyde semptomatik LUTS (alt uriner sistem semptomları) mevcut olan hastalarda alfa-1 reseptör blokeri kullanımı uygundur

G1(i): Lowe FC. Role of the newer alpha, -adrenergic-receptor antagonists in the treatment of benign prostatic hyperplasia-related lower urinary tract symptoms. Clin Ther 2004; 26(11): 1701-13. Review.

G1(ii): Schwinn DA, Roehrborn CG. Alpha1-adrenoceptor subtypes and lower urinary tract symptoms. Int J Urol. 2008 Mar;15(3):193-9. doi:10.1111/j.1442-2042.2007.01956.x. Review.

G1(iii): Dunn CJ, Matheson A, Faulds DM. Tamsulosin: a review of its pharmacology and therapeutic efficacy in the management of lower urinary tract symptoms. Drugs Aging 2002; 19(2):135-61. Review.

G1(iv): Cunningham GR, Kadmon D. Medical treatment of benign prostatic hyperplasia. In: UpToDate, Post, TW (Ed), UpToDate, Waltham, MA, 2019 Son erişim tarihi 11 Kasım 2019.

G1(v): O'Mahony D, O'Sullivan D, Byrne S, O'Connor MN, Ryan C, Gallagher P. STOPP/START criteria for potentially inappropriate prescribing in older people: version 2. Age Ageing. 2015 Mar;44(2):213-8. doi: 10.1093/ageing/afu145. Epub 2014 Oct 16. Review.

G1(vi): S. Gravas (Chair), J.N. Cornu, M.J. Drake, M. Gacci, C. Gratzke, T.R.W. Herrmann, S. Madersbacher, C. Mamoulakis, K.A.O. Tikkinen Guidelines Associates: M. Karavitakis, I. Kyriazis, S. Malde, V. Sakkalis, R. Umbach. EAU Guidelines on Management of Non-Neurogenic Male Lower Urinary Tract Symptoms (LUTS), incl. Benign Prostatic Obstruction (BPO). European Association of Urology 2018. Page 17-18.

G2. Prostatektominin endike olmadığı orta-ağır (IPSS skoru) düzeyde semptomatik LUTS (alt uriner sistem semptomları) mevcut olan hastalarda, prostat hacmi >30-40 ml ise, alfa-1 reseptör blokerine ek olarak 5-alfa redüktaz inhibitörü tedavisi başlanması uygundur

G2(i): Cunningham GR, Kadmon D. Medical treatment of benign prostatic hyperplasia. In: UpToDate, Post, TW (Ed), UpToDate, Waltham, MA, 2019 Son erişim tarihi 11 Kasım 2019.

G2(ii): O'Mahony D, O'Sullivan D, Byrne S, O'Connor MN, Ryan C, Gallagher P. STOPP/START criteria for potentially inappropriate prescribing in older people: version 2. Age Ageing. 2015 Mar;44(2):213-8. doi: 10.1093/ageing/afu145. Epub 2014 Oct 16. Review.

G2(iii): S. Gravas (Chair), J.N. Cornu, M.J. Drake, M. Gacci, C. Gratzke, T.R.W. Herrmann, S. Madersbacher, C. Mamoulakis, K.A.O. Tikkinen Guidelines Associates: M. Karavitakis, I. Kyriazis, S. Malde, V. Sakkalis, R. Umbach. EAU Guidelines on Management of Non-Neurogenic Male Lower Urinary Tract Symptoms (LUTS), incl. Benign Prostatic Obstruction (BPO). European Association of Urology 2018. Page 18-19.

G3. Semptomatik atrofik vajinitte, hormon-dışı tedaviler denendikten sonra, topikal vajinal östrojen tedavisi kullanımı uygundur

G3(i): Lynch C. Vaginal estrogen therapy for the treatment of atrophic vaginitis. J Womens Health (Larchmt) 2009; 18(10): 1595-606. Review.

G3(ii): Bachmann G, Bouchard C, Hoppe D, Ranganath R, Altomare C, Vieweg A, Graepel J, Helzner E. Efficacy and safety of low-dose regimens of conjugated estrogens cream administered vaginally. Menopause 2009; 16(4): 719-27.

G3(iii): Mainini G, Scaffa C, Rotondi M, Messalli EM, Quirino L, Ragucci A. Local estrogen replacement therapy in postmenopausal atrophic vaginitis: efficacy and safety of low dose 17beta-estradiol vaginal tablets. Clin Exp Obstet Gynecol 2005; 32(2): 111-3.

G3(iv): O'Mahony D, O'Sullivan D, Byrne S, O'Connor MN, Ryan C, Gallagher P. STOPP/START criteria for potentially inappropriate prescribing in older people: version 2. Age Ageing. 2015 Mar;44(2):213-8. doi: 10.1093/ageing/afu145. Epub 2014 Oct 16. Review.

G3(v): The use of vaginal estrogen in women with a history of estrogen-dependent breast cancer. Committee Opinion No. 659. American College of Obstetricians and Gynecologists. Obstet Gynecol 2016;127:e93-6.

G3(vi): The NAMS 2017 Hormone Therapy Position Statement Advisory Panel. The 2017 hormone therapy position statement of The North American Menopause Society. Menopause. 2017 Jul;24(7):728-753.

G3(vii): Bergendal A, Kieler H, Sundström A, Hirschberg AL, Kocoska-Maras L. Risk of venous thromboembolism associated with local and systemic use of hormone therapy in peri- and postmenopausal women and in relation to type and route of administration. *Menopause*. 2016 Jun;23(6):593-9.

G3(viii): Calle EE, Feigelson HS, Hildebrand JS, Teras LR, Thun MJ, Rodriguez C. Postmenopausal hormone use and breast cancer associations differ by hormone regimen and histologic subtype. *Cancer* 2009; 115(5): 936-45. Erratum in: *Cancer* 2009; 115(7): 1587.

G3(ix): Diergaard B, Potter JD, Jupe ER, Manjeshwar S, Shimasaki CD, Pugh TW, Defreese DC, Gramling BA, Evans I, White E. Polymorphisms in genes involved in sex hormone metabolism, estrogen plus progestin hormone therapy use, and risk of postmenopausal breast cancer. *Cancer Epidemiol Biomarkers Prev* 2008; 17(7): 1751-9.

H: Aşılar.

H1. Yıllık influenza aşısı yapılması uygundur

**Trivalan yüksek doz ve tetravalan influenza aşılarının yaşlıda etkinlikleri standart doz trivalan aşıya göre daha fazladır, tercih edilebilir.*

** Tetravalan, trivalan ve yüksek doz trivalan aşının FDA onayı vardır.*

H1(i): Hibberd PL. Seasonal influenza vaccination in adults. In: UpToDate, Post, TW (Ed), UpToDate, Waltham, MA, 2019 erişim tarihi 11 Kasım 2019

H1(ii): O'Mahony D, O'Sullivan D, Byrne S, O'Connor MN, Ryan C, Gallagher P. STOPP/START criteria for potentially inappropriate prescribing in older people: version 2. *Age Ageing*. 2015 Mar;44(2):213-8. doi: 10.1093/ageing/afu145. Epub 2014 Oct 16. Review.

H1(iii): U.S. Food and Drug Administration. Vaccines Licensed for Use in the United States. Content current as of: 05/09/2019. Available at: <https://www.fda.gov/vaccines-blood-biologics/vaccines/vaccines-licensed-use-united-states> (erişim tarihi 10 Kasım 2019)

H1(iv): Grohskopf LA, Alyanak E, Broder KR, Walter EB, Fry AM, Jernigan DB. Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices — United States, 2019–20 Influenza Season. *MMWR Recomm Rep* 2019;68(No. RR-3):1–21.

H2. Pnömonokok aşısı (13 valan konjuge ve 23 valan polisakkarid aşidan herbiri için bir doz) yapılması uygundur

i) *Daha önce pnömonokok aşısı yapılmamış bireylerde ilk doz aşısı olarak 13 valan konjuge aşı, takiben en az 1 yıl sonra 23 valan polisakkarid aşı uygulanmalıdır.*

ii) *Daha önce 23 valan polisakkarid aşı yapılmış bireylerde 1 yıl sonra 13 valan konjuge aşı yapılmalıdır.*

**23 valan polisakkarid aşı 65 yaş öncesinde uygulanmışsa, 65 yaş üstünde ilk aşidan en az 5 yıl sonra tekrarlanmalıdır*

**23 valan polisakkarid aşının 65 yaş üzeri 10 yılda bir tekrarlanması önerilebilir*

H2(i): Advisory Committee on Immunization Practices. Recommended Adult Immunization Schedule, United States, 2019. Centers for Disease Control and Prevention. Available at: <https://www.cdc.gov/vaccines/schedules/downloads/adult/adult-combined-schedule.pdf>. (erişim tarihi 10 Kasım 2019)

H2(ii): An Advisory Committee Statement (ACS) National Advisory Committee on Immunization (NACI). Update on the use of 13-valent pneumococcal conjugate vaccine (PNEU-C-13) in addition to 23-valent pneumococcal polysaccharide vaccine (PNEU-P-23) in immunocompetent adults 65 years of age and older – Interim Recommendation. Date published: October 2016. Available at: <https://www.canada.ca/en/public-health/services/publications/healthy-living/update-use-of-13-valent-pneumococcal-conjugate-vaccine-pneu-c-13-in-addition-to-23-valent-pneumococcal-polysaccharide-vaccine-pneu-p-23-immunocompetent-adults-65-years-and-older-interim-recommendation.html> (erişim tarihi 10 Kasım 2019)

H2(iii): O'Mahony D, O'Sullivan D, Byrne S, O'Connor MN, Ryan C, Gallagher P. STOPP/START criteria for potentially inappropriate prescribing in older people: version 2. Age Ageing. 2015 Mar;44(2):213-8. doi: 10.1093/ageing/afu145. Epub 2014 Oct 16. Review.

H2(iv): U.S. Food and Drug Administration. Vaccines Licensed for Use in the United States. Content current as of: 05/09/2019. Available at: <https://www.fda.gov/vaccines-blood-biologics/vaccines/vaccines-licensed-use-united-states> (Son erişim tarihi 10 Kasım 2019.)

H2(v): Heflin MT. Geriatric health maintenance. In: UpToDate, Post, TW (Ed), UpToDate, Waltham, MA, 2019 Son erişim tarihi 11 Kasım 2019.

H3. Herpes zoster aşısı yapılması uygundur (zona enfeksiyonu riskinde ve postherpetik nevralji riskinde azalma sağlar)

**Daha önce zona enfeksiyonu veya su çiçeği geçirmiş olguların da aşılınması önerilir.*

**RZV, ZVL'den daha fazla koruma sağlar.*

**RZV, ZVL'ye tercih edilir.*

**RZV intramüsküler olarak iki dozda uygulanır. İkinci doz, ilk dozdan 2-6 ay sonra verilmelidir. Bu program, önceden herpes zoster öyküsü olanlar ve daha önce ZVL almış olanlar dahil tüm hastalar için kullanılmalıdır.*

**Zona enfeksiyonu geçiren olgularda aşılama en erken 6-12 ay sonra önerilir.*

H3(i): Oxman MN, Levin MJ, Shingles Prevention Study Group. Vaccination against Herpes Zoster and Postherpetic Neuralgia. J Infect Dis 2008; 197 Suppl 2:S228.

H3(ii): Albrecht MA, Levin MJ. Vaccination for the prevention of shingles (herpes zoster). In: UpToDate, Post, TW (Ed), UpToDate, Waltham, MA, 2019 erişim tarihi 10 Kasım 2019

H3(iii): Oxman MN, Levin MJ, Johnson GR, Schmader KE, Straus SE, Gelb LD, Arbeit RD, Simberkoff MS, Gershon AA, Davis LE, Weinberg A, Boardman KD, Williams HM, Zhang JH, Peduzzi PN, Beisel CE, Morrison VA, Guatelli JC, Brooks PA, Kauffman CA, Pachucki CT, Neuzil KM, Betts RF, Wright PF, Griffin MR, Brunell P, Soto NE, Marques AR, Keay SK, Goodman RP, Cotton DJ, Gnann JW Jr, Loutit J, Holodniy M, Keitel WA, Crawford GE, Yeh SS, Lobo Z, Toney JF, Greenberg RN, Keller PM, Harbecke R, Hayward AR, Irwin MR, Kyriakides TC, Chan CY, Chan IS, Wang WW, Annunziato PW, Silber JL; Shingles Prevention Study Group. A vaccine to prevent herpes zoster and postherpetic neuralgia in older adults. N Engl J Med. 2005 Jun 2;352(22):2271-84.

H3(iv): Heflin MT. Geriatric health maintenance. In: UpToDate, Post, TW (Ed), UpToDate, Waltham, MA, 2019 erişim tarihi 11 Kasım 2019

H3(v): Kimberlin DW, Whitley RJ. Varicella-zoster vaccine for the prevention of herpes zoster. N Engl J Med. 2007 Mar 29;356(13):1338-43. Review.

H3(vi): Curran D, Patterson BJ, Van Oorschot D, Buck PO, Carrico J, Hicks KA, Lee B, Yawn BP. Cost-effectiveness of an adjuvanted recombinant zoster vaccine in older adults in the United States who have been previously vaccinated with zoster vaccine live. Hum Vaccin Immunother. 2019;15(4):765-771. doi:10.1080/21645515.2018.1558689. Epub 2019 Feb 20.

H3(vii): U.S. Food and Drug Administration. Vaccines Licensed for Use in the United States. Content current as of: 05/09/2019. Available at: <https://www.fda.gov/vaccines-blood-biologics/vaccines/vaccines-licensed-use-united-states> (erişim tarihi 10 Kasım 2019)

H3(viii): An Advisory Committee Statement (ACS) National Advisory Committee on Immunization (NACI). Updated Recommendations on the Use of Herpes Zoster Vaccines. Date published: 2018-08-30.

H4. 10 yılda bir Td (tetanoz-difteri toksoidi) yapılması uygundur

**Pertusis aşısı 1 yaşından büyük infantlarla yakın teması olan yaşlılarda (dede, nine gibi) önerilebilir.*

Bu durumda tek doz Tdap şeklinde uygulanabilir

H4(i): Recommended Adult Immunization Schedule for ages 19 years or older. <https://www.cdc.gov/vaccines/schedules/downloads/adult/adult-combined-schedule.pdf>. erişim tarihi 23 Ekim 2019

H4(ii): Ridda I, Yin JK, King C, Raina MacIntyre C, McIntyre P. The importance of pertussis in older adults: a growing case for reviewing vaccination strategy in the elderly. Vaccine. 2012 Nov 6;30(48):6745-52.

H4(iii): Centers for Disease Control and Prevention (CDC). Updated recommendations for use of tetanus toxoid, reduced diphtheria toxoid and acellular pertussis (Tdap) vaccine from the Advisory Committee on Immunization Practices, 2010. MMWR Morb Mortal Wkly Rep 2011; 60:13.

H4(iv): Heflin MT. Geriatric health maintenance. In: UpToDate, Post, TW (Ed), UpToDate, Waltham, MA, 2019 erişim tarihi 11 Kasım 2019

H4(v): Liang JL, Tiwari T, Moro P, Messonnier NE, Reingold A, Sawyer M, Clark TA. Prevention of Pertussis, Tetanus, and Diphtheria with Vaccines in the United States: Recommendations of the Advisory Committee on Immunization Practices (ACIP). MMWR Recomm Rep. 2018 Apr 27;67(2):1-44.

H4(vi): Diphtheria, tetanus toxoids, and acellular pertussis vaccine (DTaP and Tdap): Drug information, Lexicomp online. erişim tarihi 11 Kasım 2019.

H5. Hacca gidecek olgulara meningokok aşısı yapılması uygundur

**Hacdan en az 10 gün önce önerilir.*

**5 yıldan sonra tekrar seyahat edilecekse doz tekrarlanmalıdır.*

H5(i): Recommended Adult Immunization Schedule for ages 19 years or older. <https://www.cdc.gov/vaccines/schedules/downloads/adult/adult-combined-schedule.pdf>. erişim tarihi 23 Ekim 2019

H5(ii): David O F, Karin L. Immunizations for travel. In: UpToDate, Post, TW (Ed), UpToDate, Waltham, MA, 2019 erişim tarihi 10 Kasım 2019

H5(iii): Kim DK, Riley LE, Hunter P; Advisory Committee on Immunization Practices. Recommended Immunization Schedule for Adults Aged 19 Years or Older, United States, 2018. Ann Intern Med. 2018 Feb 6;168(3):210-220.

I: Suplemanlar.

I1. Malnütrisyon (MN) veya malnütrisyon riski (MNR) olan yaşlılarda beslenme danışmanlığı ve besin takviyesi diyetle alımı artırmak ve beslenme hedeflerine ulaşmak için yeterli değil ise oral nütrisyonel suplemanların (ONS) başlanması uygundur

**Kronik hastalığı olan yaşlılarda ONS başlanması ile ilgili daha çok kanıt vardır.*

**ONS içeriğinin günlük en az 400 kcal enerji ve 30 g protein içermesi ve ONS'nin en az 1 ay devam edilmesi önerilir.*

**ONS verilen olguların ayda 1 değerlendirilmesi uygundur.*

**Tedavide rehberlik etmesi açısından yaşlı bireylerde enerji alımı için tavsiye edilen değer 30 kcal/kg/gün'dür.*

**Sağlıklı yaşlı bireylerde protein alımı 1,0-1,2 g/kg/gün önerilmektedir*

**Akut veya kronik hastalığı olan yaşlı bireyler için protein alımı 1,2-1,5 g/kg/gün önerilmektedir.*

**Ciddi hastalığı, yaralanma veya malnütrisyonu olan yaşlı bireyler için protein alımının 1,5 g/kg/gün'ün üzerine 2,0 g/kg/gün'e kadar çıkarılması gerekebilir.*

I1(i): LLLnutrition Topic 8. Approach to Oral and Enteral Nutrition in Adults. Module 8.1. Indications, Contraindications, Complications and Monitoring of EN. Zanetti M. Available at: <https://lllnutrition.com/mod/page/view.php?id=2654>; (erişim tarihi 10 Kasım 2019.)

I1(ii): Norman K, Pichard C, Lochs H, Pirlich M. Prognostic impact of disease-related malnutrition. Clin Nutr 2008; 27: 5-15.

I1(iii): Stratton RJ, Green CJ, Elia M. Disease-related malnutrition: an evidence-based approach to treatment. First Edition. CABI; First edition (January 30, 2003)

I1(iv): Guest JF, Panca M, Baeyens JP, de Man F, Ljungqvist O, Pichard C, Wait S, Wilson L. Health economic impact of managing patients following a community-based diagnosis of malnutrition in the UK. Clin Nutr. 2011; 30: 422-429.

I1(v): Illnutrition: Topic 36. Nutrition in Older Adults. Module 36.1 Epidemiology, Aetiology and Consequences of Malnutrition in Older Adults: Cederholm T. Available at: <https://lllnutrition.com/mod/page/view.php?id=2685#u361p4> (erişim tarihi 10 Kasım 2019)

I1(vi): Volkert D, Beck AM, Cederholm T, Cruz-Jentoft A, Goisser S, Hooper L, Kiesswetter E, Maggio M, Raynaud-Simon A, Sieber CC, Sobotka L, van Asselt D, Wirth R, Bischoff SC. ESPEN guideline on clinical nutrition and hydration in geriatrics. Clin Nutr. 2018 Jun 18.pii: S0261-5614(18)30210-3.

I2. Hastanede yatan MN veya MNR olan yaşlılarda oral nutrisyonel suplemanların (ONS) başlanması uygundur (besin alımı ve vücut ağırlığını artırır, komplikasyon ve tekrar başvuru riskini azaltır)

**Spontan oral enerji alımı akut hastane yatışı olan yaşlılarda genellikle düşüktür ve gereksinimleri karşılamamaktadır.*

**Hastaneden çıktıktan sonra çoğu olguda ONS kullanımına devam etmek uygun olabilir.*

12(i): Volkert D, Beck AM, Cederholm T, Cruz-Jentoft A, Goisser S, Hooper L, Kiesswetter E, Maggio M, Raynaud-Simon A, Sieber CC, Sobotka L, van Asselt D, Wirth R, Bischoff SC. ESPEN guideline on clinical nutrition and hydration in geriatrics. Clin Nutr. 2018 Jun 18.pii: S0261-5614(18)30210-3.

13. Kalça kırığı olan yaşlı hastalara postoperatif dönemde ONS başlanması (nütrisyonel durumundan bağımsız olarak) uygundur (besin alımını iyileştirir ve komplikasyon riskini azaltır)

**Spesifik bir ONS (standart veya yüksek proteinli) önerisi yoktur.*

**ONS'nin en az 1 ay verilmesi uygun olabilir. Çalışmalarda, kalça kırığı sonrası ONS 1-6 ay arası kullanılmıştır.*

**Preoperatif başlanması da düşünülebilir.*

13(i): Volkert D, Beck AM, Cederholm T, Cruz-Jentoft A, Goisser S, Hooper L, Kiesswetter E, Maggio M, Raynaud-Simon A, Sieber CC, Sobotka L, van Asselt D, Wirth R, Bischoff SC. ESPEN guideline on clinical nutrition and hydration in geriatrics. Clin Nutr. 2018 Jun 18.pii: S0261-5614(18)30210-3.

14. Bası yarası mevcut olan hastalarda yeterli protein ve enerji alımını sağlamak için 1,2-2 g/kg/gün protein, 30-35 kcal/kg /gün enerji hedeflenerek ONS başlanması uygundur

**Bası yarası olan malnütre hastalarda, arjinin, çinko ve antioksidanlarla zenginleştirilmiş yüksek protein ve enerji içeriğine sahip ONS kullanımı daha faydalı olabilir.*

**Bası yarası olan hastalarda beslenme ürünlerine arjinin, glutamin ve HMB eklenmesinin olumlu sonuçları olabilir.*

14(i): Gomes F, Schuetz P, Bounoure L, Austin P, Ballesteros-Pomar M, Cederholm T, Fletcher J, Laviano A, Norman K, Poulia KA, Ravasco P, Schneider SM, Stanga Z, Weekes CE, Bischoff SC. ESPEN guidelines on nutritional support for polymorbid internal medicine patients. Clin Nutr. 2018 Feb;37(1):336-353.

14(ii): Volkert D, Beck AM, Cederholm T, Cruz-Jentoft A, Goisser S, Hooper L, Kiesswetter E, Maggio M, Raynaud-Simon A, Sieber CC, Sobotka L, van Asselt D, Wirth R, Bischoff SC. ESPEN guideline on clinical nutrition and hydration in geriatrics. Clin Nutr. 2018 Jun 18.pii: S0261-5614(18)30210-3.

14(iii): Stratton RJ, Ek AC, Engfer M, Moore Z, Rigby P, Wolfe R, Elia M. Enteral nutritional support in prevention and treatment of pressure ulcers: a systematic review and meta-analysis. Ageing Res Rev. 2005 Aug;4(3):422-50. Review.

14(iv): Volkert D, Berner YN, Berry E, Cederholm T, Coti Bertrand P, Milne A, Palmblad J, Schneider S, Sobotka L, Stanga Z; DGEM (German Society for Nutritional Medicine), Lenzen-Grossimlinghaus R, Krys U, Pirlich M, Herbst B, Schütz T, Schröer W, Weinrebe W, Ockenga J, Lochs H; ESPEN (European Society for Parenteral and Enteral Nutrition). ESPEN Guidelines on Enteral Nutrition: Geriatrics. Clin Nutr. 2006 Apr;25(2):330-60.

14(v): Cereda E, Klersy C, Seriola M, Crespi A, D'Andrea F; OligoElement Sore Trial Study Group. A nutritional formula enriched with arginine, zinc, and antioxidants for the healing of pressure ulcers: a

randomized trial. Ann Intern Med. 2015 Feb 3;162(3):167-74. doi: 10.7326/M14-0696. Erratum in: Ann Intern Med. 2015 Dec 15;163(12):964.

I4(vi): Liu P, Shen WQ, Chen HL. Efficacy of arginine-enriched enteral formulas for the healing of pressure ulcers: a systematic review. J Wound Care. 2017 Jun 2;26(6):319-323.

I4(vii): Wong A, Chew A, Wang CM, Ong L, Zhang SH, Young S. The use of a specialised amino acid mixture for pressure ulcers: a placebo-controlled trial. J Wound Care. 2014 May;23(5):259-60, 262-4, 266-9.

Kısaltmalar:

ACEİ: Anjiotensin konverting enzim inhibitörleri

ARB: Anjiotensin reseptör blokerleri

BTM: Kemik turnover belirteçleri

ChEİ: Asetilkolinesteraz inhibitörleri

COMT: Catechol-O-methyltransferase

EF: Ejeksiyon fraksiyonu

eGFR: Estimated Glomerular Filtrasyon hızı

FDA: Food and Drug Administration

FEV1: Zorlu ekspiratuvar volüm

GİS: Gastrointestinal sistem

IPSS: Uluslararası Prostat Semptom Skoru

KOAH: Kronik obstrüktif akciğer hastalığı

KMD: Kemik mineral dansitesi

LUTS: Alt üriner sistem semptomları

MAO-B: Monoamine oksidase-B

Mİ: Miyokard infarktüsü

MN: Malnütrisyon

MNR: Malnütrisyon riski

NSAİİ: Non steroidal anti inflamatuvar ilaçlar

OAK: Oral antikoagülan

ONS: Oral nütrisyonel supleman

RZV: Recombinant zoster aşısı

SaO₂: Oksijen saturasyonu

SNRIs: Serotonin-norepinefrin geri alım inhibitörleri

SSRIs: Selectif serotonin geri alım inhibitörleri

Tdap: Tetanoz, difteri, and aselüler pertussis

ZVL: Zoster vaccine live