## 7. Literatur


1. Barnett E., Nordin B.E.C. (1960)
   The radiological diagnosis of osteoporosis: A new approach
   Clin. Radiol 2: 166-174

2. Bauer R.L. (1988)
   Ethnic differences in hip fracture
   Am J Of Epidemiology 127: 145 – 149

3. Beardsworth l.J., Eyre D.R., Dickson I.R. (1990)
   Changes with age in the urinary excretion of lysyl- and hydroxylysylpyridinoline, two new markers of bone collagen turnover
   J Bone Miner Res 5: 671 – 676

4. Bellahcene A., Merville M.-P., Castronovo V. (1994)
   Expression of bone sialoprotein, a bone matrix protein, in human breast cancer
   Cancer Res 54: 2823 - 2826

5. Bellahcene A, Kroll M., Liebens F., Castronovo V. (1996)
   Bone Sialoprotein expression in primary human breast cancer is associated with bone metastases development
   J Bone Mineral Research 11: 665 - 670

6. Berning B., van Kuijk C, Schutte H.E., Kuiper J.W., Drogendijk A.C., Fauser B.C. (1993)
   determinants of lumbar bone mineral density in normal weight, non-smoking women soon after menopause. A study using clinical data and quantitative computed tomography.
   Bone Miner 21 (2): 129 – 139

7. Blomqvist C., Elomaa I., Virkkunen P., Porkka L., Karonen S.-L., Risteli L., Risteli J. (1987)
   The response evaluation of bone metastases in mammary carcinoma. The value of radiology, scintigraphy and biochemical markers of bone metabolism.
   Cancer 60: 2907 – 2912

8. Body J.J., Cleeren A., Pot M., Borkowski A. (1986)
   Serum osteocalcin (BGP) in tumor-associated hypercalcemia
   J Bone Miner Res 1: 523 – 527

9. Body J.J., delmas P.D. (1992)
Urinary pyridinium cross-links as markers of bone resorption in tumor-associated hypercalcemia
J Clin Endocrinol Metab 74: 471 – 475

10. Bouillon R., Vanderschueren D., van Herck E., Nielsen H.K., Bex M., Heyns W., van Baelen H. (1992)
Homologous radioimmunoassay of human osteocalcin
Clin Chem 38: 2055 – 2060

11. Brown J.P., Delmas P.D., Malaval L., Edouard C., Chapuy M.C., Meunier P.J. (1984)
Serum bone Gla-protein: a specific marker for bone formation in postmenopausal osteoporosis
Lancet 1: 1091 – 1093

12. Carlson K., Ljunghall S., Simonsson B., Smedmyr B. (1992)
Serum osteocalcin concentrations in patients with multiple myeloma – correlation with disease stage and survival
J Int Med 231: 133 – 137

13. Castronovo V., Bellahcene A. (1998)
Evidence that breast cancer associated microcalcifications are mineralized malignant cells
Int J Oncol 12 (2): 305 - 308

14. Charles P., Mosekilde L., Jensen F.T. (1986)
Primary hyperparathyreoidism: evaluated by 47 cacium kinetics, calcium balance and serum bone-Gla-protein
Eur J Clin Invest 16: 277 – 283

15. Christiansen C., Riis B.J., Rodboro P. (1987)
Prediction of rapid bone loss in postmenopausal women
Lancet 1: 1105 – 1108

16. Citrin D.R., Cohen A.I., Harberg J., Schlise S., Houges R. (1981)
systemic treatment of advanced prostatic cancer: development of a new system for defining response
J Urol 125: 224 – 229

17. Civitelli R., Gonnelli S., Zacchei F., Bigazzi S., Vattimo A., Avioli L.V., Gennari C. (1988)
Bone turnover in postmenopausal osteoporosis. Effect of calcitonin treatment
J Clin Invest 82: 1268 – 1274

18. Clarke N.W., Mc Clure J., George N.J.R. (1992)
Disodium pamidronate identifies differential osteoclastic bone resorption in metastatic prostate cancer
Br J Urol 69: 64 – 70

19. Coleman R.E., Houston S., James I., Rodger A., Rubens R.D., Leonard R.C.F., Ford J. (1992)
Preliminary results of the use of urinary excretion of pyridinium crosslinks for monitoring metastatic bone disease
Br J Cancer 65: 766 – 768

20. Colson F., Berny C., Tebib J. (1990)
Assessment of bone resorption by measuring tartrate-resistant acid phosphatase (TacP) activity in serum
In: Osteoporosis, Christiansen C., Overgaard K. (eds.), Osteopress, Copenhagen 621 – 622

21. Compston J.E. (1990)
Osteoporosis
Clin Endocrinol 33: 653 - 682

22. Cosman F., Shen V., Herrington B.S., Fang X., Seibel M.J., Ratcliffe A., Lindsay R. (1993)
Estrogen protection against bone resorbing effects of parathyroid hormone infusion. Assessment by use of biochemical markers.
Ann Int Med 118: 337-343

23. Cöster A., Haberkamp M., Allolio B. (1994)
Inzidenz von Schenkelhalsfrakturen in der Bundesrepublik Deutschland im internationalen Vergleich.
Soz Präventivmed 39: 287 – 292

24. Cummings S.R., Kelsey J.L., Nevitt M.C., Odowd K.J. (1985)
Epidemiology of osteoporosis and osteoporotic fractures
Epidemiol Rev 7: 178 – 208

25. Cummings S.R., Black D.M., Navic M.C. (1990)
Appendicular bone density and age predict hip fracture in women
J Am Med Soc 263: 665 – 668

26. Dambacher M.A., Ittner J., Rüegsegger P. (1986)
Osteoporose-Pathogenese, Prophylaxe, Therapie
Internist 27: 206 – 213

27. Dandona P., Coumar A., Gill S., Bell S., Thomas M. (1988)
Sodium fluoride stimulates osteocalcin in normal subjects
Clin Endocrin 29: 437 – 441

28. De La Piedra C., Torres R., Rapado A., Diaz-Curiel M., Castro N. (1989)
Serum tartrate-resistant acid phosphatase and bone mineral content inpostmenopausal osteoporosis
Calcif Tissue Int 45: 58 – 60

29. Deftos L.J., Wolfert R.L., Hill C.S. (1991)
Bone alkaline phosphatase in Paget's disease
Horm Metab Res 23: 559 – 561

30. Delling G. (1984)
Skelettsystem
In: W. Remmele (Herausgeber): Pathologie (Band 4), Springer-Verlag, Berlin-Heidelberg-New York- Tokio

31. Delmas P.D., Schlemmer A., Gineyts E., Riis B., Christiansen C. (1991)
Urinary excretion of pyridinoline crosslinks correlates with bone turnover measured on iliac crest biopsy in patients with vertebral osteoporosis
J Bone Miner Res 6: 639 – 644

32. Delmas P.D. (1993a)
Biochemical markers of bone turnover in postmenopausal osteoporosis
Calcif Tissue Int 52: S5, A18

33. Demiaux B., Arlot M.E., Chapuy M-C., Meunier P.J., Delmas P.D. (1992)
Serum osteocalcin is increased in patients with osteomalacia: correlations with biochemical and histomorphometric findings
J Clin Endocrin Metab 74: 1146 – 1151

34. Deutsches Grünes Kreuz (1997)
Osteoporose, Leitlinien Medizin, Die Empfehlungen der Deutschen Arbeitsgemeinschaft Osteoporose (DAGO)
2. Auflage, Kilian-Verlag

35. Diaz Diego E.M., Guerrero R., De la Piedra C. (1994)
Six osteocalcin assays compared
Clin Chem 40: 2071 – 2077

36. Diehl I.J. et al. (1997)
Elevated serum bone sialoprotein in primary breast cancer patients is potent marker for bone metastases
Proc Asco, Abstract #461

37. Dören M., Faßbender W.J., Lauritzen C., Stracke H. (1997)
Prophylaxe und Therapie der Osteoporose mit Östrogenen und Gestagenen
Thieme Verlag Stuttgart-New York

38. Duda R.J., Kumar R., Nelson K.I., Zinsmeister A.R., Mann K.G., Riggs B.L. (1987)
1,25-Dihydroxyvitamin D stimulation test for osteoblast function in normal and osteoporotic postmenopausal women
J Clin Invest 79: 1249 – 1253

39. Duda R.J., O'Brien J.F., Katzmann J.A., Peterson J.M., Mann K.G., Riggs B.L. (1988)
Concurrent assays of circulating bone Gla-protein and bone alkaline phosphatase: effects of sex, age and metabolic bone disease
J Clin Endocrinol Metab 66: 951-957

40. Eastell R., Delmas P.D., Hodgson S.F., Eriksen E.F., Mann K.G., Riggs B.L. (1988)
Bone formation rate in older normal women: concurrent assessment with bone histomorphometry, calcium kinetics and biochemical markers
J Clin Endocrinol Metab 67: 741 – 748

41. Ebeling P.R., Atley L.M., Eyre D.R., Guthrie J., Dennerstein L., Wark J.D. (1993)
Sensitivity of collagen cross-links and osteocalcin in detecting early menopausal changes in bone turnover
In: proceedings on the IVth international symposium on osteoporosis & consensus development conference Hongkong, Christiansen C., Riis B., Aalborg S156, A 580

42. Elffors I., Allander E., Kanis J.A., Gullberg B., Johnell O., Dequeker J., Dilsen G., Gennari C., Poles Vaz A.A., Lyritis G., Mazzuolio G.F., Miravet L., Passeri M., Perez Cano R., Rapado A., Ribot C. (1994)
The variable incidence of hip fracture in southern europe: the MEDOS study
Osteoporosis Int 4: 253 – 263

43. Epstein S., Poser J., McClintock R., Johnston C.C.jr., Bryce G., Hui S. (1984)
Differences in serum bone Gla-protein with age and sex
Lancet 1: 307 – 310

44. Epstein S. (1988)
Serum and urinary markers of bone remodelling: assessment of bone turnover
Endocrine Reviews 9: 437 – 449

45. Eriksen E.F., Charles P., Melsen F., Mosekilde L., Risteli L., Risteli J. (1993)
Serum markers of type I collagen formation and degradation in metabolic bone disease: correlation with bone histomorphometry
J Bone Miner Res 8: 127 – 132

46. Eyre D.R., Dickson I.R., Van Ness K.P. (1988)
Collagen crosslinks in human bone and cartilage
Biochem J 252: 495 – 500

47. Felson D.T., Zhang Y., Hannan M.T., Kiel D.P., Wilson P.W., Anderson J.J. (1993)
The effect of postmenopausal estrogen therapy on bone density in elderly women
N Engl J Med 329: 1141 – 1146

48. Fisher L.W., Mc Bride O.W., Termine J.D., Young M.F. (1990)
Human Bone Sialoprotein
J Biol Chem 265: 2347 – 2351

49. Fisher L.W., Whiteson S.W., Avioli L.V., Termine J.D. (1983)
Matrix Sialoprotein of developing bone
J Biol Chem 258: 12723 – 12727

50. Friedlander A.L., Genent H.K., Sadowsky S., Byl N.N., Glüer C.C. (1995)
A two-year programm of aerobics and weight training enhaces bone mineral density of young women
J Bone Miner Res 10: 574 – 585

51. Gambacciani M., Spinetti A., de Simone L., Cappagli B., Maffei S., Taponeco F., Fioretti P. (1993)
The relative constribution of menopause and aging to postmenopausal vertebral osteopenia
J Clin Endocrinol Metab 77: 1148 – 1151

52. Gärdsell P., Johnell O., Nillson B.E. (1991)
The predictive value of bone loss for fragility in women: A longitudinal study over 15 years
Calcif Tissue Int 49: 90 – 94

53. Garnero P., Delmas P.D. (1993)
Assessment of the serum levels of bone alkaline phosphatase with a new immunoradiometric assay in patients with metabolic bone disease
J Clin Endocrinol Metab 77: 1046 – 1053

54. Gennari C., Agnusdei D., Gonnelli S., Civitelli R., Zacchei F., Cepollaro C. (1990)
Bone turnover and bone loss in early postmenopausal women
In: Osteoporosis. Christiansen C., Overgaard K. (Herausgeber), third International Symposium on Osteoporosis, Copernhagen, Denmark: 673 – 675

55. Greenspan S.L., Maitland L.A., Kido T., Myers E.R. (1994)
Elderly women continue to lose trabecular and cortical bone
J Bone Miner Res 9: 385

56. Greskötter K.R. Dr. (1996)
Pathologie – Klinische Medizin, systematisch
Lorch Würtemberg, Band II

57. Grey A.B., Ames R.W., Matthews R.D., Reid I.R. (1993)
Bone mineral density and bone composition in adult patients with cystic fibrosis
Thorax 48: 585 – 586

58. Gundberg C.M., Markowitz M.E., Mizruchi M., Rosen J.F. (1985)
Osteocalcin in human serum: a circadian rhythm
J Clin Endocrinol Metab 60: 736 – 739

59. Gundberg C.M., Lian J.B., Gallop P.M. (1988)
Measurements of gamma-carboxyglutamate and circulating osteocalcin in normal children and adults
Clin Chim Acta 128: 1 – 7

60. Gunja-Smith Z., Boucek R.J. (1981)
Collagen crosslinking compounds in human urine
Biochem J 197: 759 – 762

61. Hassager C., Fabbri-Mabelli G., Christiansen C. (1993)
The effect of the menopause and hormone replacement therapy on serum carboxyterminal propeptide of type I collagen
Osteoporosis Int 3: 50 – 52

62. Heinegard B., Carey D., Alini M., Ionescu M., Rosenberg L.G., Poole A.R., Heinegard D., Saxne T. (1995)
Cartilage and bone metabolism in rheumatoid arthritis
J Clin Invest 95: 1071 - 1077

63. Hetlund M.L., Haarbo J., Christiansen C. (1993)
Low bone mass and high bone turnover in male long distance runners
J Clin Endocrinol Metab 77: 770 – 775

64. Hosoda K., Eguchi H., Nakamoto T., Kubota T., Honda H., Jindai S., Hasegawa R., Kiyoki M., Yamaji T., Shiraki M. (1992)
sandwich immunoassay for intakt human osteocalcin
Clin Chem 38: 2233 – 2238

65. Jaworski Z.F.G. (1984)
Coupling of bone formation to bone resorption: a broader view
Calcif Tissue Int 36: 531 – 536

66. Johansson A.G., Forslund A., Hambraeus L., Blum W.F., Ljunghall S. (1994)
growth hormone-dependent insulin-like growth factor binding protein is a major determinant of bone mineral density in healthy men
J Bone Miner Res 9: 915 – 921

67. Johnston C.C. (1989)
Clinical indications for bone mass measurements
J Bone Mineral Res 4: 1 – 28

68. Junqueira, Carneiro
Histologie
4. Auflage, Springer-Verlag

69. Karmatschek M., Maier I., Seibel M.J., Woitge H.W., Ziegler R., Armbruster F.P (1997)
Improved purification of human bone sialoprotein and development of homologous radioimmunoassay
Clin Chem 43: 11; 2076 - 2082

70. Keck E., Kruse H.-P. (1994)
Osteoporose: Klinik – Diagnostik – Therapie
Gustav Fischer Verlag, Jena – Stuttgart, 1. Auflage

71. Kelly P.J. (1990)
Dietary calcium, sex hormones and bone mineral density in men
Br Med J 300: 1361 – 1364

72. Kirk S., Sharp C.F., Elbaum N., Enders D.B., Simons S.M., Mohler J.G., Rude R.K. (1989)
Effect of long-distance running on bone los mass in women
J Bone Miner Res 4: 515 – 522

73. Krall E.A., Dawson-Hughes B. (1993)
Heritable and life-style determinants of bone mineral density
J Bone Miner Res 8: 1 – 9

74. Krane S.M., Kantrowitz F.G., Byrne M., Pinnel S.R., Singer F.R. (1977)
urinary excretion of hydroxylysine and ist glycosides as an index of collagen degradation
J Clin Invest 59: 819 – 827

75. Kroger H., Tuppurainen M., Honkanen R., Alhava E., Saarikoski S. (1994)
Bone mineral density and risk factors for osteoporosis – a population-based study of 1600 perimenopausal women
Calcif Tissue Int 55: 1 – 7

76. Kruse H.P., Kuhlencordt F. (1980)
Pathogenesis and natural course of primary osteoporosis
Lancet 1: 280 – 282

77. Kyd P.A., Jamil A., Fairney A. (1993)
Serum procollagen type i carboxyterminal extension peptide as an osteoblast marker of bone turnover
Calcif Tissue Int 52: S7, A26

78. Laitinen K., Karkkainen M., Lalla M., Lamberg-Allardt C., Tunninen R., Tahtela R., Valimaki M. (1993)
Is alcohol an osteoporosis-inducing agent for young and middle-aged women?
Metabolism 42: 875 – 881

79. Lam K.W., Siemens M., Sun T., Li C.Y., Yam L.T. (1982)
Enzyme immunoassay for tartrate-resistant acid phosphatase
Clin Chem 28: 467 – 470

80. Leblanc A.D., Schneider V.S., Evans H.J., Engelbretson D.A., Krebs J.M. (1990)
Bone mineral loss and recovery after 17 weeks of bed rest
J Bone Miner Res 5: 843 – 850

81. Lian J.B., Friedman P.A. (1987)
The vitamin K-dependent synthesis of gamma-carboxyglutamic acid by bone microsomes
J Biol Chem 253: 6623 – 6626

82. Lipton A., Demers L., Daniloff Y., Curley E., Hamilton C., Harvey H., Witters L., Seaman J., Van der Giessen R., Seyedin S. (1993)
Increased urinary excretion of pyridinium cross-links in cancer patients
Clin Chem 39: 614 – 618

83. Löffler G., Petrides P.E. (1990)
Physiologische Chemie
4.Auflage, Springer-Verlag, Berlin-Heidelberg-New York-London-Paris-Tokio

84. Lukert B.P., Higgins J.C., Stoskopf M.M. (1986)
Serum osteocalcin is increased in patients with hyperparathyreoidism and decreased in patients receiving glucocorticoids
J Clin Endocrinol Metab 62: 1056 - 1058

85. Mallmin H., Ljunghall S., Larsson K. (1993)
Biochemical markers of bone metabolism in patients with fracture of the distal forearm
Clin Orthop 295: 259 – 263

86. Mansson B., Carey D., Alini M., Ionescu M., Rosenberg L.C., Poole A.R., Heinegard D., Saxne T. (1995)
Cartilage and bone metabolism in rheumatoid arthritis
J Clin Invest 95: 1071 – 1077

87. Marowska J., Lukaszkiewicz J., Kobylinska M., Matusik H., Talajko A., Lebiedowski M., Olszaniecka M., Madjei M., Lorence R.S. (1993)
Age-related changes of urinary pyridinoline and deoxypyridinoline in healthy children
Pol Tyg Lek 48: 39 – 42

88. Minkin C. (1982)
Bone acid phosphatase: Tartrate-resistant acid phosphatase as a marker of osteoclast finction
Calcif Tissue Int 34: 285 – 290

89. Mole P.A., Walkinshaw M.H., Robins S.P., Paterson C.R. (1992)
Can urinary pyridinium crosslinks and urinary oestrogens predict bone mass and rate of bone loss after the menopause?
Europ J Clin Invest 22: 767 – 771

90. Monoghan D.A., Power M.J., Fottrell P.F. (1993)
Sandwich enzyme immunoassay of osteocalcin in serum with use of an antibody against human osteocalcin
Clin Chem 39: 942 – 947

91. Monzani M., Sartorio A., Conti A. (1993)
Bone Gla-Protein levels in some Endocrinole disorders
Calcif Tissue Int 52: S 63, A 250

92. Moss D.W. (1982)
Alkaline phosphatase isoenzymes
Clin Chem 28: 2007 – 2016

93. Napal J., Amado J. A., Riancho J.A., Olmos J.M., Gonzalez-Macias J. (1993)
Stress decreases the serum level of osteocalcin
Bone Miner 21: 113 – 118

94. Nielson H. K., Brixen K., Kassem M., Christiansen S.E., Mosekilde L. (1991)
Diurenal rhythm in serum osteocalcin:relation with sleep, growth hormone and PTH (1-84)
Calcif Tissue Int 49: 373 – 377

95. Pagani F., Panthegini M. (1994)
Diurenal rhythm in urinary excretion of pyridinium crosslinks
Clin Chem 40: 952 – 953

96. Papapoulos S.E., Frolich M., Mudde A.H., Harinck H.L., V.d.Berg H., Bijvoet O.L. (1987)
Serum osteocalcin in Paget's disease of bone: basal concentrations and response to bisphosphonate treatment
J Clin Endocrinol Metab 65: 89 – 94

97. Parisien M., Silverberg S.J., Shane E., Dempster D.W., Bilizikian J.P. (1990)
Bone disease in primary hyperparathyroidism
Endocrinol Metab Clinics N America 19: 19 – 34

98. Paterson C.R., Robins S.P., Horobin J.M., Preece P.E., Cuschieri A. (1991)
Pyridinium crosslinks as markers of bone resorption in patients with breast cancer
Br J Cancer 64: 884 – 886

99. Peretz A., Praet J.-P., Rozenberg S., Bosson D., Famaey J.P., Bourdoux P. (1989)
Osteocalcin and bone mineral content in rheumatoid arthritis
Clin Rheumatol 8: 42 – 48

100. Peterson I.F., Boegard T., Dahlström J., Svensson B., Heinegard D., Saxne T. (1998)
Bone scan and serum markers of bone and cartilage in patients with knee pain and osteoarthritis
Osteoarthritis Cartilage 6: 33 – 39

101. Peterson I.F., Boegard T., Svensson B., Heinegard D., Saxne T. (1998)
Changes in cartilage and bone metabolism identified by serum markers in early osteoarthritis of the knee joint
Brit J Rheum 37: 46 - 50

102. Pietschmann P., Machold K.P., Wolosczuk W., Smolen J.S. (1989)
Serum osteocalcin concentrations in patients with rheumatoid arthritis
Ann Rheum Diseases 48: 654 – 657

103. Power M.J., Fottrell P.F. (1989)
Solid-phase enzymoimmunoassay for osteocalcin in human serum or plasma, with use of a monoclonal antibody
Clin Chem 35: 2087 – 2092

104. Price C.P., Mitchell C.A., Noonan K. (1993)
Experience with an immunoradiometric assay for skeletal alkaline phosphatase
Calcif Tissue Int 52: S94, A375

105. Prockop D.J., Kivirikko K.I., Tuderman L., Guzman N.A. (1979)
The biosynrhesis of collagen and ist disorders
New Engl J Med 301: 13 – 23

106. Riggs B.L., Tsai K.-S., Mann K.G. (1986)
Effect of acute increase in bone matrix degradation on circulating levels of bone-Gla-protein
J Bone Miner Res 1: 539 – 542

107. Robins S.P., Black D., Paterson R.C., Reid D.M., Duncan A., Seibel M.J. (1991)

Evaluation of urinary hydroxypyridinium crosslink measurement as resorption markers in metabolic bone disease
Europ J Clin Invest 21: 310 – 315

108. Saxne T., Zunino L., Heinegard D. (1995)
Increased release of bone sialoprotein into synovial fluid reflects tissue destruction in rheumatoid arthritis
Arth Rheum 38: 82 – 90

109. Schlemmer A., Hassager C., Jensen S.B., Christiansen C. (1992)
Marked diurnal variation in urinary excretion of pyridinium cross-links in premenopausal women
J Clin Endocrinol Metab 74: 476 – 480

110. Seibel M.J., Duncan A., Robins S.P. (1989)
urinary hydroxypyridinium crosslinks provide indices of cartilage and bone involvement in arthritic disease
J Rheumatol 16: 964 – 970

111. Seibel M.J., Cosman V., Shen V., Ratcliffe A., Lindsay R. (1991a)
Urinary hydroxy-pyridinium crosslinks of collagen are indicative of increased bone resorption in osteoporosis
Trans Orth Soc 16: 279 – 285

112. Seibel M.J., Hlibczuk V., Gräber M., Del Pozo, Mc Kinsey A., Ratcliffe A., Robins S.P. (1991b)
Serum keratan sulphate and urinary hydroxy-pyridinium crosslinks of collagen are independent markers of cartilage and bone involvement in adjuvant arthritis
Trans Orth Soc 16: 229 – 235

113. Seibel M.J. (1992a)
Hydroxypyridinium-Crosslinks im Urin als spezifischer Marker der Knochenresorption bei metabolischen Knochenerkrankungen
Klein Lab 38: 642 – 643

114. Seibel M.J., Gartenberg F., Silverberg S.J., Ratcliffe A., Robins S.P., Bilezikian J.P. (1992b)
Urinary hydroxypyridinium crosslinks of collagen in primary hyperparatyroidism

J Clin Endocrinol Metab 74: 481 – 486

115. Seibel M.J., Robins S.P., Bilezikian J.P. (1992c)
Urinary pyridinium crosslinks of collagen. Specific markers of bone resorption in metabolic bone disease
Trends Endocrinol Metab 3: 263 – 270

116. Seibel M.J., Cosman V., Shen V., Ratcliffe A., Lindsay R. (1993a)
Urinary hydroxy-pyridinium crosslinks of collagen as markers of bone resorption and estrogen efficacy in postmenopausal osteoporosis
J Bone Min Res 8: 881 – 889

117. Seibel M.J., Pecherstorfer M., Schilling T., Ziegler R. (1993b)
Pyridinium-Crosslinks im Urin bei tumorassoziierter Hypercalcämie: Beziehung zu Serum-PTH und Biphosphonat-Therapie
Med Klinik 88: S2, PB146

118. Seibel M.J., Raue F. (1993c)
Biochemische Marker des Knochenstoffwechsels und ihre Bedeutung bei der Osteoporose-Diagnostik.
Endokrin Info 17: 18 – 22

119. Seibel M.J., Woitge H.W., Ziegler R. (1993d)
Biochemische Marker des Knochenstoffwechsels I: Grundlagen
Klein Lab 39: 717 – 727

120. Seibel M.J., Woitge H.W., Ziegler R. (1993e)
Biochemische Marker des Knochenstoffwechsels II: Klinische Anwendung
Klein Lab 39: 839 – 850

121. Seibel M.J., Woitge H.W., Scheidt-Nave C., Leidig-Bruckner G., Duncan A., Nicol P., Ziegler R., Robins S.P. (1994)
Urinary hydroxypyridinium crosslinks of collagen in a population-based screening for overt vertebral osteoporosis: results of a pilot study
J Bone Miner Res 9: 1433 - 1440

122. Seibel M.J., Woitge H.W., Pecherstorfer M., Karmatschek M., Horn E., Ludwig H., Armbruster F.P., Ziegler R. (1996)

Serum immunoreactive bone sialoprotein as a new marker of bone turnover in metabolic and malignant bone disease
J Clin Endokrin Metab 81: 3289 – 3294

123. Seibel M.J., Woitge H.W., Karmatschek M., Horn E., Ludwig H., Armbruster F.P., Ziegler R. (1996)
A new radioimmunoassay for bone sialoprotein in serum, a potential marker of bone turnover
Clin Lab 42: 875 – 878

124. Silverberg S.J., Shane E., DeLaCruz L., Bilezikian P. (1989)
Skeletal disease in primary hyperparathyroidism
J Bone Miner Res 4: 283 – 291

125. Simon L.S., Krane S.M., Wortman P.D., Krane I.M., Kovitz K.L. (1984)
Serum levels of type I and type III procollagen fragments in Paget's disease of bone
J Clin Endocrinol Metab 58: 110 – 120

126. Smith R. (1980)
Collagen and disorders of bone
Clin Sci 59: 215 – 223

127. Stein G.S., Lian J.B., Owen T.A. (1990)
Relationship of cell growth to the regulation of tissue specific gene expression during osteoblast differentiation
FASEB J 4: 3111 - 3123

128. Stepan J.J., Silinkova-Malkova E., Havranek T., Formankova J., Zichova M., Lachmanova J., Strakova M., Broulik P., Pacorsky V. (1983)
Relationship of plasma tartrate-resistant acid phosphatase to the bone isoenzyme of serum alkaline phosphatase in hyperparathyoidism
Clin Chim Acta 133: 189 – 200

129. Stepan J.J., Presl J., Broulik P., Pacovsky V. (1987)
Serum osteocalcin levels and bone alkaline phosphatase isoenzyme after ophorectoomy and in primary hyperparathyroidism
J Clin Endocrinol Metab 64: 1079 – 1082

130. Stepan J.J., Cimbalnikova E., Miichalska J., Tesarova A., Bayer M., Kutilek S. (1993)
Telopeptide ICTP is more specific than hydroxyproline, pyridinoline orgalactosyl-hydroxylysine in the assessment of bone resorption in healthy children and adults
Calcif Tissue Int 52: S91, A364

131. Stracke H., Schatz C., Pralle H., Ullmann J., Schatz H. (1985)
Osteocalcin, ein Marker bei Erkrankungen mit erhöhtem Knochenumsatz
Dtsch Med Wschr 110: 1442 – 1446

132. Szulc P., Chapuy M.-C., Meunier P.J., Delmas P.D. (1993)
Serum undercarboxylated osteocalcin is a marker of the risk of hip fracture in elderly women
J Clin Invest 91: 1769 – 1774

133. Szulc P., Arlot M., Chapuy M.-C., Duboeuf F., Meunier P.J., Delmas P.D. (1994)
Serum undercarboxylated osteocalcin correlates with hip bone mineral density in elderly women
J Bone Miner Res 9: 1591 – 1595

134. Tasch O., Franck H., Ittel T.H., Herborn G., Rau R. (1993)
Bone turnover in patients with rheumatic arthritis, effect of anatomical stages, inflammatory activity and therapy
Calcif Tissue Int 52: S68, A269

135. Tavassoli M., Rizo M., Yam L.T. (1980)
Elevation of serum acid phosphatase in cancers with bone metastasis
Cancer 45: 2400 – 2403

136. Tittel K. (1990)
Beschreibende und funktionelle Anatomie des Menschen
11.Auflage, Gustav Fischer Verlag, Stuttgart-New York

137. Torres R., De la Piedra C., Rapado A. (1989)
Osteocalcin and bone remodelling in Paget's disease of bone, primary hyperparathyroidism, hypercalcaemia of malignancy and involutional osteoporosis
Scand J Clin Lab Invest 49: 279 – 285

138. Valimaki M., Tiihonen M., Laitinen K., Tahtela R., Karkkainen M. (1993)

Bone mineral density measured by dual-energy x-ray absorptiometry and novel markers of bone formation and resorption in patients on antiepileptic drugs
J Bone Miner Res 9: 631 – 637

139. Van Straalen J.P., Sanders E., Prummel M.F., Sanders G.T.B. (1991)
bone alkaline phosphatase as indicator of bone formation
Clin Chim Acta 201: 27 – 34

140. Withold W. (1996)
Monitoring of bone turnover biological, Preanalytical and technocal criteria in the assessment of biochemical markers
Eur J Clin Chem Clin Biochem 34: 785 – 799

141. Withold W., Armbruster F.P., Karmatschek M., Reinauer H. (1997)
Bone Sialoprotein in serum of patients with maligant bone disease
Clin Chem 43: 85 – 91

142. Woitge H.W. (1996)
Biochemische Marker des Knochenstoffwechsels bei Gesunden und Individuen mit vertebraler Osteoporose: Ergebnisse einer epidemiologisch-biochemischen Untersuchung
Dissertation, Ruprecht-Karls-Universität Heidelberg

143. Yasumura S., Aloia J.F., Gundberg C.M., Yeh J., Vaswani A.N., Yuen K., Lo-Monte A.F., Ellis K.J., Cohn S.H. (1987)
Serum osteocalcin and total body calcium in normal pre- and postmenopausal women and postmenopausal osteoporotic patients
J Clin Endocrinol Metab 64: 681 – 685

144. Yuming L., Woitge H.W., Kissling C., Lang M., Oberwittler H., Karmatschek M., Armbruster F.P., Schickfus A.R.v., Ziegler R., Seibel M.J. (1998)
Biological varibility of serum immunoreactive bone sialoportein
Clin Lab 44: 553 – 555

145. Ziegler R. (1993)
Was ist gesichert in der Behandlung der Osteoporose der Frau in der Menopause?
Internist Berl 34: 18 - 24