



## Sex hormone-binding globulin in osteoporosis

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Titre	Sex hormone-binding globulin in osteoporosis
Type de publication	Article de revue
Auteur	Hoppé, Emmanuel [1], Bouvard, Béatrice [2], Royer, Mathieu [3], Audran, Maurice [4], Legrand, Erick [5]
Type	Article scientifique dans une revue à comité de lecture
Année	2010
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Titre de la revue	Joint Bone Spine
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Mots-clés	Bone mineral density [6], bone turnover markers [7], Fracture [8], osteoporosis [9], sex hormone-binding globulin [10]
Résumé en anglais	<p>Sex hormone-binding globulin (SHBG) is a plasma glycoprotein that binds with high affinity to sex steroids, most notably <math>5\alpha</math>-dihydrotestosterone, testosterone, and <math>17\beta</math>-estradiol, thereby regulating their bioavailability and access to target cells. SHBG modulates the sex-steroid signaling system by binding to a specific membrane receptor (SHBG-R). Plasma SHBG levels vary in health and disease due to the effects of multiple regulation factors (age, body weight, sex steroids, insulin, and others). SHBG is involved in a number of diseases, including osteoporosis. Several studies found an inverse correlation between serum SHBG levels and bone mineral density in both males and females. SHBG levels may predict a number of macro-architectural characteristics of cortical bone. Weaker links have been reported between SHBG and bone turnover markers. Finally, high SHBG levels predict the occurrence of osteoporotic fractures of the vertebrae and peripheral bones, most notably the proximal femur. Together with estradiol, SHBG plays a key role in the genesis of bone loss and osteoporotic fractures. Given that serum SHBG elevation is associated with the occurrence of multiple fractures, determination of the serum SHBG level, which can be readily performed in everyday clinical practice, may constitute a useful new marker for predicting the severity of osteoporosis.</p>
URL de la notice	<a href="http://okina.univ-angers.fr/publications/ua10472">http://okina.univ-angers.fr/publications/ua10472</a> [11]
DOI	<a href="https://doi.org/10.1016/j.jbspin.2010.03.011">10.1016/j.jbspin.2010.03.011</a> [12]
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### Liens

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