Supplementary file 2: Selected excluded studies

Changes in body composition after allogeneic haematopoietic stem cell transplantation (HSCT) with total body irradiation (TBI) for treatment of leukaemia in children, teenagers and young adults (CTYA): a restricted systematic review

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The following papers did not meet the inclusion criteria for this review (they were excluded at the full text screening stage) but may nevertheless include relevant information on the topic. We provide them here for reference.

Body composition outcomes were measured but are not the main focus of the study (n=27).

Afify, Z., P. J. Shaw, A. Clavano-Harding and C. T. Cowell (2000). "Growth and endocrine function in children with acute myeloid leukaemia after bone marrow transplantation using busulfan/cyclophosphamide." Bone Marrow Transplantation **25**(10): 1087-1092.

Alter, C. A., P. S. Thornton, S. M. Willi, N. Bunin and T. Moshang, Jr. (1996). "Growth in children after bone marrow transplantation for acute myelogenous leukemia as compared to acute lymphocytic leukemia." Journal of Pediatric Endocrinology & Metabolism **9**(1): 51-57.

Aplenc, R., M. J. Zhang, L. Sung, X. Zhu, V. T. Ho, K. Cooke, C. Dvorak, G. Hale, L. M. Isola, H. M. Lazarus, P. L. McCarthy, R. Olsson, M. Pulsipher, M. C. Pasquini, N. Bunin, C. f. I. B. Regimen-Related Toxicity Working Committee and R. Marrow Transplant (2014). "Effect of body mass in children with hematologic malignancies undergoing allogeneic bone marrow transplantation." Blood **123**(22): 3504-3511.

Bakker, B., G. G. Massa, W. Oostdijk, M. H. Van Weel-Sipman, J. M. Vossen and J. M. Wit (2000). "Pubertal development and growth after total-body irradiation and bone marrow transplantation for haematological malignancies." European Journal of Pediatrics **159**(1-2): 31-37.

Bakker, B., W. Oostdijk, R. B. Geskus, W. H. Stokvis-Brantsma, J. M. Vossen and J. M. Wit (2006). "Patterns of growth and body proportions after total-body irradiation and hematopoietic stem cell transplantation during childhood." Pediatric Research **59**(2): 259-264.

Bakker, B., W. Oostdijk, R. B. Geskus, W. H. Stokvis-Brantsma, J. M. Vossen and J. M. Wit (2007). "Growth hormone (GH) secretion and response to GH therapy after total body irradiation and haematopoietic stem cell transplantation during childhood." Clinical Endocrinology **67**(4): 589-597.

Bernard, F., P. Bordigoni, M. C. Simeoni, V. Barlogis, A. Contet, A. Loundou, I. Thuret, B. Leheup, H. Chambost, B. Play, P. Auquier and G. Michel (2009). "Height growth during adolescence and final height after haematopoietic SCT for childhood acute leukaemia: the impact of a conditioning regimen with BU or TBI." Bone Marrow Transplantation **43**(8): 637-642.

Bushhouse, S., N. K. Ramsay, O. H. Pescovitz, T. Kim and L. L. Robison (1989). "Growth in children following irradiation for bone marrow transplantation." American Journal of Pediatric Hematology/Oncology **11**(2): 134-140.

Choi, Y. J., S. Y. Park, W. K. Cho, J. W. Lee, K. S. Cho, S. H. Park, S. H. Hahn, M. H. Jung, N. G. Chung, B. Cho, B. K. Suh and H. K. Kim (2013). "Factors related to decreased bone mineral density in childhood cancer survivors." Journal of Korean Medical Science **28**(11): 1632-1638.

Cohen, A., A. Rovelli, M. T. Van-Lint, C. Uderzo, A. Morchio, C. Pezzini, G. Masera, A. Bacigalupo and C. Romano (1996). "Final height of patients who underwent bone marrow transplantation during childhood." Archives of Disease in Childhood **74**(5): 437-440.

Couto-Silva, A. C., C. Trivin, H. Esperou, J. Michon, A. Baruchel, J. C. Souberbielle and R. Brauner (2010). "Bone markers after total body irradiation in childhood." Bone Marrow Transplantation **45**(3): 437-441.

Eissa, H. M., L. Lu, M. Baassiri, N. Bhakta, M. J. Ehrhardt, B. M. Triplett, D. M. Green, D. A. Mulrooney, L. L. Robison, M. M. Hudson and K. K. Ness (2017). "Chronic disease burden and frailty in survivors of childhood HSCT: a report from the St. Jude Lifetime Cohort Study." Blood Advances **1**(24): 2243-2246.

Friedman, D. N., P. Hilden, C. S. Moskowitz, M. Suzuki, F. Boulad, N. A. Kernan, S. L. Wolden, K. C. Oeffinger and C. A. Sklar (2017). "Cardiovascular Risk Factors in Survivors of Childhood Hematopoietic Cell Transplantation Treated with Total Body Irradiation: A Longitudinal Analysis." Biology of Blood & Marrow Transplantation **23**(3): 475-482.

Galletto, C., A. Gliozzi, D. Nucera, N. Bertorello, E. Biasin, A. Corrias, P. Chiabotto, F. Fagioli and C. Guiot (2014). "Growth impairment after TBI of leukemia survivors children: a model- based investigation." Theoretical Biology & Medical Modelling **11**: 44.

Holm, K., K. Nysom, M. H. Rasmussen, H. Hertz, N. Jacobsen, N. E. Skakkebaek, S. Krabbe and J. Muller (1996). "Growth, growth hormone and final height after BMT. Possible recovery of irradiation-induced growth hormone insufficiency." Bone Marrow Transplantation **18**(1): 163-170.

Hovi, L., J. Rajantie, M. Perkkio, K. Sainio, I. Sipila and M. A. Siimes (1990). "Growth failure and growth hormone deficiency in children after bone marrow transplantation for leukemia." Bone Marrow Transplantation **5**(3): 183-186.

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Leung, W., M. M. Hudson, D. K. Strickland, S. Phipps, D. K. Srivastava, R. C. Ribeiro, J. E. Rubnitz, J. T. Sandlund, L. E. Kun, L. C. Bowman, B. I. Razzouk, P. Mathew, P. Shearer, W. E. Evans and C. H. Pui (2000). "Late effects of treatment in survivors of childhood acute myeloid leukemia." Journal of Clinical Oncology **18**(18): 3273-3279.

Mostoufi-Moab, S., J. P. Ginsberg, N. Bunin, B. Zemel, J. Shults and M. B. Leonard (2012). "Bone density and structure in long-term survivors of pediatric allogeneic hematopoietic stem cell transplantation." Journal of Bone & Mineral Research **27**(4): 760-769.

Nysom, K., K. Holm, K. F. Michaelsen, H. Hertz, N. Jacobsen, J. Muller and C. Molgaard (2000). "Bone mass after allogeneic BMT for childhood leukaemia or lymphoma." Bone Marrow Transplantation **25**(2): 191-196.

Papadimitriou, A., M. Urena, G. Hamill, R. Stanhope and A. D. Leiper (1991). "Growth hormone treatment of growth failure secondary to total body irradiation and bone marrow transplantation." Archives of Disease in Childhood **66**(6): 689-692.

Quek, S. C., K. Y. Loke, T. C. Quah, S. K. Lam and B. W. Lee (1992). "Long term endocrine complications of acute leukemia therapy--a case report." Journal of the Singapore Paediatric Society **34**(3-4): 214-216.

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Uderzo, C., A. Locasciulli, A. Rovelli, M. R. Rossi, M. Jankovic, L. Adamoli, M. Bonomi, A. Balduzzi, A. Biondi, R. Schiro and et al. (1992). "Bone marrow transplantation for childhood leukemia: five years' experience in a pediatric hematology center." Haematologica **77**(3): 257-264.

Included leukaemia but also other health conditions (n=37)

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Baena-Gomez, M. A., M. J. de la Torre Aguilar, M. D. Mesa, F. J. Llorente-Cantarero, J. L. Perez Navero and M. Gil-Campos (2013). "Effects of parenteral nutrition formulas on plasma lipid profile in children with bone marrow transplantation." Annals of Nutrition & Metabolism **63**(1-2): 103-110.

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Couto-Silva, A. C., C. Trivin, H. Esperou, J. Michon, A. Baruchel, P. Lemaire and R. Brauner (2006). "Final height and gonad function after total body irradiation during childhood." Bone Marrow Transplantation **38**(6): 427-432.

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Wood, R. M. (1990). "Growth patterns in pediatric bone marrow transplant patients." Journal of Pediatric Nursing **5**(4): 252-258.

Yokoyama, S., T. Fujimoto, T. Mitomi, M. Yabe, H. Yabe and S. Kato (1989). "Use of total parenteral nutrition in pediatric bone marrow transplantation." Nutrition **5**(1): 27-30.

Included both autologous and allogeneic HSCT

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Beauloye, V., M. Steffens, F. Zech, C. Vermylen and D. Maiter (2013). "Characterization of insulin resistance in young adult survivors of childhood acute lymphoblastic leukaemia and non-Hodgkin lymphoma." Clinical Endocrinology **78**(5): 790-798.

Frisk, P., S. M. Rossner, S. Norgren, J. Arvidson and J. Gustafsson (2011). "Glucose metabolism and body composition in young adults treated with TBI during childhood." Bone Marrow Transplantation **46**(10): 1303-1308.

Oudin, C., P. Auquier, Y. Bertrand, A. Contet, J. Kanold, N. Sirvent, S. Thouvenin, M. D. Tabone, P. Lutz, S. Ducassou, D. Plantaz, J. H. Dalle, V. Gandemer, S. Beliard, J. Berbis, C. Vercasson, V. Barlogis, A. Baruchel, G. Leverger and G. Michel

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