

Supplementary Table 4: Methods used to determine patellofemoral joint reaction force in the included studies

Methodological approach	Study
Planar analytical knee model	
<i>Quadriceps muscle force (F_q) = Knee extension moment (KEM) ÷ Effective moment arm of the quadriceps about the knee (Leff)</i>	Almonroeder 2017 ²⁵
	Almonroeder 2015 ²⁶
	Almonroeder 2020 ²⁷
	Atkins 2018 ²⁸
	Atkins 2019 ²⁹
	Bini 2013 ³⁰
	Bini 2014 ³¹
	Bini 2013 ³²
	Bini 2016 ³³
	Bonacci 2018 ³⁴
	Bonacci 2014 ³⁵
	Brechtler 2002 ³⁶
	Bressel 2001 ³⁷
	Chinkulprasert 2011 ⁴⁰
	Costigan 2002 ⁴¹
	Herrington 2017 ⁵⁰
	Ho 2012 ⁵¹
	Ho 2018 ⁵²
	Hofmann 2017 ⁵³
	Kujawa 2020 ⁵⁶
	Kulmala 2013 ⁵⁷
	Macdonald 1989 ⁶⁰
	Mostamand 2010 ⁶²
	Powers 2004 ⁶⁴
	Powers 2004 ⁶⁵
	Richards 2016 ⁶⁶
	Roos 2012 ⁶⁸
	Sinclair 2014 ⁶⁹
	Sinclair 2015 ⁷⁰
	Sinclair 2020 ⁷²
	Sinclair 2015 ⁷³
	Sinclair 2018 ⁷⁵
	Sinclair 2016 ⁷⁶
	Sinclair 2018 ⁷⁷
	Sinclair 2016 ⁷⁸
	Steinkamp 1993 ⁷⁹
Sussman 2000 ⁸⁰	
Teng 2020 ⁸¹	
Teng 2014 ⁸²	
Waiteman 2018 ⁸⁵	
Wallace 2002 ⁸⁶	

	Wang 2020 ⁸⁷
	Ward 2004 ⁸⁸
	Whyte 2010 ⁸⁹
	Zavala 2020 ⁹⁵
<i>Quadriceps muscle force (Fq) from electromyography and muscle physiological cross-sectional area</i>	Escamilla 1998 ⁴³
	Escamilla 2001 ⁴⁴
	Escamilla 2008 ⁴⁵
	Escamilla 2008 ⁴⁶
	Escamilla 2009 ⁴⁷
<i>Quadriceps muscle force (Fq) from three-dimensional musculoskeletal model without patella</i>	Fok 2013 ⁴⁸
	Kernozek 2020 ⁵⁴
	Kernozek 2018 ⁵⁵
	Ristow 2019 ⁶⁷
<i>Quadriceps muscle force (Fq) from planar musculoskeletal model without patella</i>	De Oliveira Silva 2020 ⁴²
	Messier 2008 ⁶¹
	Thoma 2017 ⁸³
	Willson 2015 ⁹⁰
	Willson 2015 ⁹¹
	Willy 2019 ⁹²
	Willy 2016 ⁹³
	Willy 2016 ⁹⁴
Three dimensional musculoskeletal model with patella	
<i>Three-dimensional patella motion with elastic foundation contact</i>	Van Rossum 2018 ⁸⁴
<i>Patella motion prescribed using planar equations</i>	Chen 2014 ³⁸
	Chen 2010 ³⁹
	Lenhart 2014 ⁵⁸
	Liao 2018 ⁵⁹
	Peng 2020 ⁶³
	Sinclair 2019 ⁷¹
	Sinclair 2019 ⁷⁴
Method not adequately reported	
	Han 2013 ⁴⁹