

# Annexes of the study of "Correlation of anthropometric measurements and ultrasound measurements to establish dry needling protocol of the iliocostalis lumborum muscle: cross-sectional observational study."

## Annex SI. Normality tests.

Table S1. Normality test

	W	p value
#		
Weight	0.057	0.845
Height	0.068	0.597
Body Mass Index	0.059	0.813
Neutral axillary circumference	0.093	0.156
Neutral xiphoid circumference	0.111	0.038
Neutral abdominal circumference	0.110	0.039
Inspiration axillary circumference	0.085	0.253
Axillary expiratory circumference	0.100	0.088
Inspirational xiphoid circumference	0.125	0.010
Expiratory xiphoid circumference	0.092	0.159
Inspiration abdominal circumference	0.099	0.094
Abdominal expiratory circumference	0.091	0.179

#	W	p value
Chest-triceps skinfolds thickness	0.095	0.137
Abdomen-iliac crest skinfolds thickness	0.180	0.000
Thigh skinfolds thickness	0.086	0.241
fat percentage	0.080	0.354
Right L2 without compression: skin-lumbar iliocostal upper border	0.292	0.000
Right L2 without compression: lumbar iliocostal skin-inferior border	0.325	0.000
Right L2 without compression: skin-kidney	0.328	0.000
Right L2 with compression: skin-lumbar iliocostal upper border	0.303	0.000
Right L2 with compression: lumbar iliocostal skin-lower edge	0.335	0.000
Right L2 with compression: skin-kidney	0.333	0.000
Left L2 without compression: skin-lumbar iliocostal upper border	0.274	0.000
Left L2 without compression: lumbar iliocostal skin-inferior border	0.309	0.000
Left L2 without compression: skin-kidney	0.320	0.000
Left L2 with compression: skin-lumbar iliocostal upper border	0.306	0.000
Left L2 with compression: lumbar iliocostal skin-lower edge	0.333	0.000

#	W	p value
Left L2 with compression: skin-kidney	0.334	0.000
Right L4 without compression: skin-lumbar iliocostal upper border	0.278	0.000
Right L4 without compression: lumbar iliocostal skin-inferior border	0.309	0.000
Right L4 without compression: skin-peritoneum	0.308	0.000
Right L4 with compression: skin-lumbar iliocostal upper border	0.300	0.000
Right L4 with compression: lumbar iliocostal skin-inferior border	0.316	0.000
Right L4 with compression: skin-peritoneum	0.320	0.000
Left L4 without compression: skin-lumbar iliocostal upper border	0.281	0.000
Left L4 without compression: lumbar iliocostal skin-inferior border	0.324	0.000
Left L4 without compression: skin-peritoneum	0.327	0.000
Left L4 with compression: skin-lumbar iliocostal upper border	0.314	0.000
Left L4 with compression: lumbar iliocostal skin-inferior border	0.329	0.000
Left L4 with compression: skin-peritoneum	0.331	0.000

**Annex SII. Results depending on kind of measurements (with compression VS without compression).**

*Table S2. Results depending on kind of measurements (with VS without compression).*

	P hdxuhp hqwł z łkrrwł#łrp suhvłrq#	P hdxuhp hqwł z łk#łrp suhvłrq#	<sup>d</sup> s#doxh#
#			
q#	99#	99#	#
05#łłjkw#łnlq(nłgqh #	5716905613;#	591:90571<8#	313;:##
05#łłiw#łnlq(nłgqh #	57144055189#	5813;0561;8#	3178#
07#łłjkw#łnlq(shułwłrqhxp #	5:1790591:;#	6314;05;1;3#	31578#
07#łłiw#łnlq(shułwłrqhxp #	5;18<05:16:;#	6314305;195#	31987#

G dwdłn{ suhvvhg#łłvłłp hđq0#łwđqgdug#łhyłłwłrq:

<sup>dł</sup>vłj qłłłfdqwlł#?3138:##

**Annex SIII. Regression analysis. Dominant vs. non-dominant side comparison.**

Table S3. Dominant vs. non-dominant side comparison.

#	grp lqdqwhj#	qrq(grp lqdqwhj#	dws#doch#
q#	9;#	9;#	#
05# lkrxw#nlq#Erp suhvlrq#sshu#drfrwd#xp edu#hgjh#	;B40<18#	:1<40;17;#	318#
05# lkrxw#nlq#Erp suhvlrq#qihulru#drfrwd#xp edu#hgjh#	4;1;04:167#	4<15<04:1: :#	31;97#
05# lkrxw#lgqh #nlq#Erp suhvlrq#	58115056156#	58156056113#	31;4;#
05# lkrxw#xp edu#drfrwd#sshu#hgjh#nlq#Erp suhvlrq#	;17<0;1:5#	;1:60<118#	31: :4#
05# lkrxw#xp edu#drfrwd#brz hu#hgjh#nlq#Erp suhvlrq#	5411504<17<#	531; :04<11<#	31:57#
05# lkrxw#lgqh #nlq#Erp suhvlrq#	5:1730571<3#	591:7057167#	31964#
07# lkrxw#nlq#Erp suhvlrq#sshu#drfrwd#xp edu#hgjh#	441;3045114#	<1:9044116#	31156#
07# lkrxw#nlq#Erp suhvlrq#qihulru#drfrwd#xp edu#hgjh#	5519705417: #	55135054117#	31<;<#
07# lkrxw#Erp suhvlrq#nlq#shulrqhxp #	5;17;0591<#	5;17705:158#	31;66#
07# lkrxw#nlq#Erp suhvlrq#sshu#drfrwd#xp edu#hgjh#	431;80441<3#	<1;704317;#	31958#
07# lkrxw#nlq#Erp suhvlrq#brz hu#drfrwd#xp edu#hgjh#	5711<056113#	5616:0551:9#	31976#
07# lkrxw#shulrqhxp #nlq#Erp suhvlrq#	631<505<1135#	5<1: ;05;16;#	3196;#

Gdw#h{ suhvhg#lv#p hdq0#wldggdug#ghyldvlrq#

grp lqdqwhj# qrqgrp lqdqwhj# d<sup>o</sup>s#ydoch#

#  
v<sup>o</sup>ljq<sup>o</sup>l<sup>o</sup>lfdqwhj#?3B8I#

---

**Annex SIV. Smoothed model with the dependent variable L4 without compression**

Table S4. Smoothed model with the dependent variable L4 without compression.

	HG I#	gi <sub>hi</sub> #	I#	<sup>d</sup> s† ydaoh#
#				
Djh#	3B33#	6#	3B33#	3k;:#
Erg P dvv#qgh{#	4D4<#	5#	5A7:#	3B7;#
Qhxwdd{bdu flufp ihuhqfh#	3l;6<#	6#	4B58#	3B66#
Qhxwdd#degrp bddflufp ihuhqfh#	4k:8#	6#	;1:59#	?3B34#
FkhwOulsfhsv#nlqirg#klnqhvv#	4D8;#	6#	5D45#	3B45#
Degrp hq(bdf# fuhw# vnlqirg# wklnqhvv#	4B33#	6#	7k8:#	?3B34#
Wkljk#nlqirg#klnqhvv#	4B88#	6#	3k46#	3A45#
HGI#Hihfwyh#ghjuhv#ri#iuhgrp #gi <sub>hi</sub> : uhuhqfh#ghjuhv#ri#iuhgrp #				
°vljqllfdqw#s?3B8:#				

**Annex SV. Smoothed model with the dependent variable L4 with compression.**

Table S5. Smoothed model with the dependent variable L4 with compression.

	HGI#	gi <sub>hi</sub> #	I#	<sup>a</sup> S† ydoxh#
#				
Djh#	3B33#	6#	3B33#	3k77#
Erg P dvv#qgh{#	4k3: #	6#	51; :6#	3B3<#
Qhxwdd{bdu #lufxp ihuhqfh#	3B:8#	6#	3B<<#	3B:6#
Qhxwdd#degrp hqdfufxp ihuhqfh#	4k<: #	6#	43B93#	?3B34#
FkhwOulsfhsv#vnlqirg#klnqhvv#	31;<5#	6#	5B;7#	3B36#
Degrp hq(bdf# fuhw# vnlqirg; klnqhvv#	3k96#	6#	7B37#	?3B34#
Wkljk+nlqirg#klnqhvv#	3B33#	6#	3B33#	3B:5#
HGI#Hihfwyh#ghjuhvh#i#uhgrp I#				
gi <sub>hi</sub> #ihuhqfh#ghjuhvh#i#uhgrp #				
<sup>a</sup> vljqlifdqw#s?3B8: #				



**Annex SVI. Smoothed model with the dependent variable L2 without compression.**

Table S6. Smoothed model with the dependent variable L2 without compression.

	HGI#	gi <sub>hi</sub> #	I#	<sup>a</sup> s† ydoxh#
#				
Djh#	419;5#	6#	;1;87#	?31334#
Erg P dvv#qgh{#	41686#	6#	41386#	313;7#
Qhxwdd{ldu flfxp ihuhqfh#	31333#	6#	31333#	3176<#
Qhxwdd{degrp lddflfxp ihuhqfh#	4189;#	6#	41856#	31374#
Fkhvw(wlfhsv#nlqirg#klnqhvv#	513;5#	6#	5;1:5#	?31334#
Degrp hq(lldf# fuhvw# vnqirg#klnqhvv#	31;<5#	6#	451<36#	?31334#
Wkljk#nlqirg#klnqhvv#	31<;#	6#	<41468#	?31334#
HGI#iihfwyhghjuhvr i#uhhgrp #				
gi <sub>hi</sub> #iihuhqfhghjuhvr i#uhhgrp #				
°vljqllfdqws?3138.3#				

**Annex SVII. Smoothed model with the dependent variable L2 with compression.**

Table S7. Smoothed model with the dependent variable L2 with compression.

	HGI#	gi <sub>hi</sub> #	I#	<sup>a</sup> S† ydoxh#
#				
Djh#	3B33#	6#	3B33#	4#
Erg P dvv#qgh{#	41674#	5#	41;68#	3B97#
Qhxwdd{bdu #flfxp ihuhqfh#	31;96#	6#	4B<9#	3B4:#
Qhxwdd#degrp bdd#flfxp ihuhqfh#	41<95#	6#	431<;#	?3B34#
FkhwQulfhsv#vnlqirg#klnqhvv#	31;:7#	6#	5B:6#	3B3<#
Degrp hq(bdf# fuhw# vnlqirg; klnqhvv#	4B33#	6#	7B::#	?3B34#
Wkljktvnlqirg#klnqhvv#	4177:#	6#	4B4:#	3B;6#
HGI=Hiihfwhh#ghjuhvh#i#uhhgrp #				
gi <sub>hi</sub> #ihuhqfh#ghjuhvh#i#uhhgrp #				
#				
°vljqllfdqw#s?3B8:#				