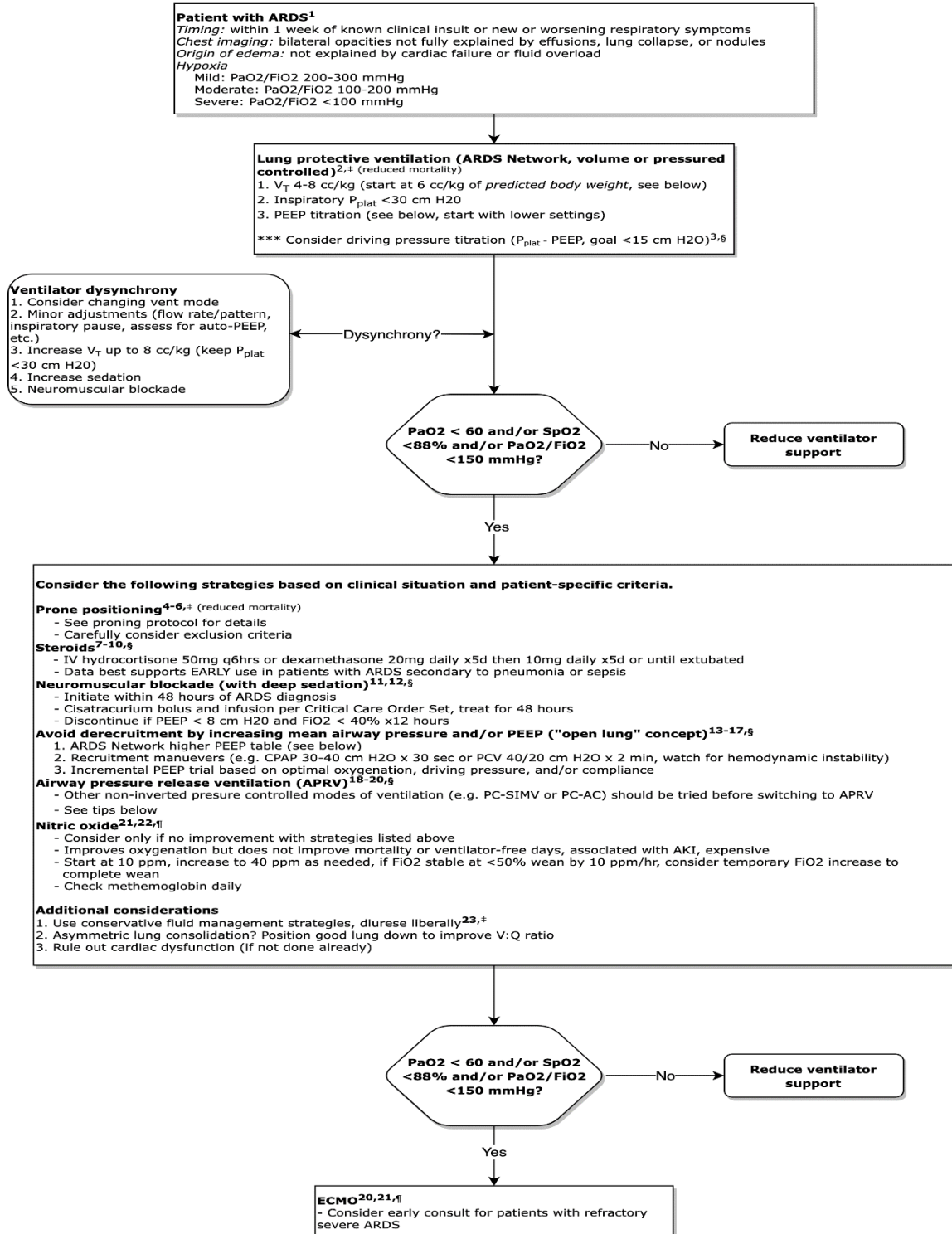


**WakeMed ARDS Treatment Algorithm**



**Levels of evidence:**  
 † Strong recommendation  
 § Conditional recommendation  
 ¶ Evidence is limited

MALE QUICK REFERENCE FOR TIDAL VOLUME					
HEIGHT	INCHES	PBW	8 mL/KG	6 mL/KG	4 mL/KG
4'6"	54	36.2	290	220	150
4'7"	55	38.5	310	230	160
4'8"	56	40.8	330	250	170
4'9"	57	43.1	350	260	170
4'10"	58	45.4	370	270	180
4'11"	59	47.7	380	290	190
5'0"	60	50.0	400	300	200
5'1"	61	52.3	420	320	210
5'2"	62	54.6	440	330	220
5'3"	63	56.9	460	340	230
5'4"	64	59.2	480	360	240
5'5"	65	61.5	490	370	250
5'6"	66	63.8	510	390	260
5'7"	67	66.1	530	400	270
5'8"	68	68.4	550	410	280
5'9"	69	70.7	570	430	290
5'10"	70	73.0	590	440	290
5'11"	71	75.3	600	450	300
6'0"	72	77.6	620	470	310
6'1"	73	79.9	640	480	320
6'2"	74	82.2	660	500	330
6'3"	75	84.5	680	510	340
6'4"	76	86.8	700	520	350

KG = kilogram; mL = milliliter; PBW = predicted body weight

FEMALE QUICK REFERENCE FOR TIDAL VOLUME					
HEIGHT	INCHES	PBW	8 mL/KG	6 mL/KG	4 mL/KG
4'6"	54	31.7	260	190	130
4'7"	55	34.0	270	210	140
4'8"	56	36.3	290	220	150
4'9"	57	38.6	310	230	160
4'10"	58	40.9	330	250	170
4'11"	59	43.2	350	260	180
5'0"	60	45.5	370	280	180
5'1"	61	47.8	380	290	190
5'2"	62	50.1	400	300	200
5'3"	63	52.4	420	320	210
5'4"	64	54.7	440	330	220
5'5"	65	57.0	460	340	230
5'6"	66	59.3	480	360	240
5'7"	67	61.6	500	370	250
5'8"	68	63.9	510	390	260
5'9"	69	66.2	530	400	270
5'10"	70	68.5	550	410	280
5'11"	71	70.8	570	430	290
6'0"	72	73.1	590	440	290
6'1"	73	75.4	610	450	300
6'2"	74	77.7	620	470	310
6'3"	75	80.0	640	480	320
6'4"	76	82.3	660	500	330

KG = kilogram; mL = milliliter; PBW = predicted body weight

Lower PEEP/Higher F<sub>IO2</sub>

F <sub>IO2</sub>	0.3	0.4	0.4	0.5	0.5	0.6	0.7	0.7	0.7	0.8	0.9	0.9	0.9	1.0
PEEP	5	5	8	8	10	10	10	12	14	14	14	16	18	18-24

Higher PEEP/Lower F<sub>IO2</sub>

F <sub>IO2</sub>	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.5	0.5	0.5-0.8	0.8	0.9	0.9	1.0	1.0
PEEP	5	8	10	12	14	14	16	16	18	20	22	22	22	22	24

**APRV tips**

- APRV is an inverse ratio pressure control type setting
- Set P<sub>High</sub> (use desired plateau pressure, typically 25-30 cm H<sub>2</sub>O)
- Set P<sub>Low</sub> (default = 3 cm H<sub>2</sub>O)
- Set T<sub>Low</sub> to create desired auto-PEEP and V<sub>T</sub>
  - Auto-PEEP is created by cutting expiration short
  - T<sub>Low</sub> typically 0.2-0.8 sec (0.8 sec is good starting point)
  - Observe expiratory flow graphic to target an expiratory flow cutoff of 50-75% of peak expiratory flow
  - Assess auto-PEEP (via an expiratory hold) and adjust T<sub>Low</sub>/expiratory flow cutoff to achieve desired auto-PEEP
  - Assess V<sub>T</sub> (goal ~ 6 cc/kg predicted bodyweight) and adjust T<sub>Low</sub>/expiratory flow cutoff to achieve desired V<sub>T</sub>
- Set respiratory rate (typically 10-15/min). This is the easiest way to manipulate T<sub>High</sub> and the I:E ratio.

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## DEFINITIONS:

<b>ARDS</b>	<b>Acute Respiratory Distress Syndrome</b>
<b>APRV</b>	<b>Airway Pressure Release Ventilation</b>
<b>I:E Ratio</b>	<b>Ratio of the duration of inspiratory and expiratory phases</b>

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