

Supplemental Materials

Phthalate exposures and microRNA expression in uterine fibroid tissue: The FORGE Study

Ami R. Zota, Sc.D.¹, Ruth J. Geller, M.H.S.¹, Brianna VanNoy, M.P.H.¹, Cherie Q. Marfori, M.D.², Sana Tabbara, M.D.³, Lisa Y. Hu, B.S.⁴, Andrea A. Baccarelli, M.D., Ph.D.⁴, Gaby N. Moawad, M.D.²

¹Department of Environmental and Occupational Health, The George Washington University Milken Institute School of Public Health, Washington DC, USA

²Department of Obstetrics and Gynecology, The George Washington University, Washington DC, USA

³Department of Pathology, The George Washington University, Washington DC, USA

⁴Department of Environmental Health Sciences, Columbia University Mailman School of Public Health, New York, NY, USA

Address correspondence to:

Ami R. Zota, ScD, MS
Department of Environmental and Occupational Health
Milken Institute School of Public Health
The George Washington University
950 New Hampshire Avenue NW
Washington, DC 20052
Phone: 202-994-9289
Email: azota@gwu.edu

Table S1. Common sources of phthalates measured in FORGE study

Phthalate	Urinary metabolites	Common sources
Diethyl phthalate (DEP)	Monoethyl phthalate (MEP)	Fragrance, cosmetics, medications ^{a,b,c}
Di- <i>n</i> -butyl phthalate (DnBP)	Mono- <i>n</i> -butyl phthalate (MnBP) Mono-hydroxybutyl phthalate (MHBP)	Cosmetics, medications, food packaging, food, PVC applications ^{a,c,d,e,f,k}
Diisobutyl phthalate (DiBP)	Monoisobutyl phthalate (MiBP) Mono-hydroxyisobutyl phthalate (MHiBP)	Cosmetics, food, food packaging ^{a,b,d,e}
Butylbenzyl phthalate (BBzP)	Monobenzyl phthalate (MBzP)	PVC flooring, food, food packaging ^{d,h}
Di- <i>n</i> -octyl phthalate (DnOP)	Mono(3-carboxypropyl) phthalate (MCP)	PVC applications, food, food packaging ^{d,e,f}
Diisononyl phthalate (DiNP)	Monocarboxyooctyl phthalate (MCOP)	PVC applications, toys, flooring, wall covering ^{f,i,j}
Diisodecyl phthalate (DiDP)	Monocarboxynonyl phthalate (MCNP)	PVC applications, toys, wires and cables, flooring ^{f,i,j}
Di(2-ethylhexyl) phthalate (DEHP)	Mono(2-ethylhexyl) phthalate (MEHP) Mono(2-ethyl-5-hydroxyhexyl) phthalate (MEHHP) Mono(2-ethyl-5-oxohexyl) phthalate (MEOHP) Mono(2-ethyl-5-carboxypentyl) phthalate (MECPP)	PVC applications, toys, cosmetics, food, food packaging ^{a,b,d,e,f,k,i}

^aKoniecki et al. (2011), ^bDodson et al. (2012), ^cKelley et al. (2012), ^dFierens et al. (2012), ^eSchechter et al. (2013), ^fKawakami et al. (2011), ^gCirillo et al. (2013), ^hKavlock et al. (2002), ⁱStringer et al. (2000), ^jEuropean Chemicals Agency (2012).

Table S2. Associations between individual phthalate biomarkers and miRNAs in fibroid tissue^a

Phthalate biomarker	miRNA name	Estimate	95% CI	P value	FDR q-value ^b	
MEP	miR-429	-0.60	(-0.93, -0.27)	0.0006	0.24	
	miR-548c-5p	-0.29	(-0.47, -0.10)	0.004	0.53	
	miR-200b-3p	-0.46	(-0.77, -0.16)	0.004	0.53	
	miR-645	-0.77	(-1.32, -0.23)	0.007	0.66	
	let-7f-2-3p	-0.21	(-0.38, -0.05)	0.01	0.75	
	miR-124-3p	-0.47	(-0.83, -0.10)	0.01	0.75	
	miR-374a-5p	0.96	(0.17, 1.76)	0.02	0.75	
	miR-31-3p	0.53	(0.09, 0.97)	0.02	0.75	
	miR-548d-5p	-0.23	(-0.42, -0.04)	0.02	0.75	
	miR-216b-5p	-0.23	(-0.43, -0.04)	0.02	0.75	
	miR-1243	-0.44	(-0.81, -0.07)	0.02	0.75	
	miR-651-5p	-0.65	(-1.21, -0.09)	0.02	0.78	
	miR-151a-3p	-0.57	(-1.07, -0.07)	0.03	0.83	
	miR-635	-0.27	(-0.52, -0.02)	0.04	0.96	
	miR-564	0.79	(0.05, 1.52)	0.04	0.96	
	miR-550a-5p	-0.20	(-0.39, -0.01)	0.04	0.96	
	miR-876-3p	0.19	(0.01, 0.38)	0.04	0.97	
	miR-192-5p	-0.09	(-0.19, 0.00)	0.04	0.97	
	MnBP	miR-338-5p	1.55	(0.53, 2.58)	0.004	0.73
		miR-744-3p	0.33	(0.10, 0.55)	0.005	0.73
miR-135b-5p		0.96	(0.29, 1.62)	0.006	0.73	
miR-7-2-3p		0.56	(0.16, 0.97)	0.007	0.73	
miR-494-3p		-0.28	(-0.49, -0.07)	0.01	0.75	
miR-1179		0.70	(0.16, 1.24)	0.01	0.84	
miR-135a-5p		0.89	(0.12, 1.67)	0.02	0.99	
miR-455-5p		0.42	(0.04, 0.80)	0.03	0.99	
miR-1226-5p		-0.41	(-0.79, -0.04)	0.03	0.99	
miR-659-3p		0.36	(0.02, 0.70)	0.04	0.99	
miR-214-3p		-0.22	(-0.43, -0.01)	0.04	0.99	
miR-34b-3p		0.30	(0.01, 0.59)	0.04	0.99	
miR-616-5p		0.20	(0.00, 0.39)	0.05	0.99	
MHBP	miR-10a-5p	0.76	(0.40, 1.11)	0.0001	0.05	
	miR-30a-3p	0.65	(0.25, 1.06)	0.002	0.40	
	miR-142-5p	0.70	(0.24, 1.15)	0.004	0.40	
	miR-142-3p	0.75	(0.25, 1.25)	0.004	0.40	
	miR-744-3p	0.48	(0.15, 0.80)	0.006	0.43	
	miR-642a-5p	1.25	(0.36, 2.14)	0.007	0.44	

	miR-378a-5p	-1.25	(-2.18, -0.32)	0.01	0.54
	miR-455-5p	0.69	(0.15, 1.23)	0.01	0.60
	miR-10a-3p	0.57	(0.11, 1.02)	0.02	0.60
	miR-15a-3p	0.61	(0.09, 1.12)	0.02	0.60
	miR-410-3p	0.63	(0.09, 1.17)	0.02	0.60
	miR-191-3p	0.54	(0.07, 1.01)	0.03	0.60
	miR-154-5p	1.66	(0.20, 3.11)	0.03	0.60
	miR-181a-2-3p	0.58	(0.05, 1.10)	0.03	0.60
	miR-125b-1-3p	0.42	(0.03, 0.81)	0.03	0.60
	miR-660-5p	0.60	(0.05, 1.16)	0.03	0.60
	miR-182-5p	1.23	(0.07, 2.38)	0.04	0.60
	miR-125b-5p	0.60	(0.03, 1.18)	0.04	0.60
	miR-216b-5p	0.49	(0.01, 0.97)	0.04	0.60
	miR-720	0.67	(0.02, 1.31)	0.04	0.60
	miR-579-3p	0.48	(0.00, 0.95)	0.05	0.60
MiBP	miR-7-2-3p	0.73	(0.23, 1.23)	0.006	0.68
	miR-135a-5p	1.32	(0.35, 2.28)	0.009	0.68
	miR-660-5p	0.61	(0.15, 1.08)	0.01	0.68
	miR-218-5p	0.60	(0.13, 1.07)	0.01	0.68
	miR-378a-5p	-1.03	(-1.84, -0.22)	0.01	0.68
	miR-1179	0.84	(0.17, 1.52)	0.02	0.68
	miR-501-5p	0.45	(0.09, 0.82)	0.02	0.68
	miR-154-3p	-0.65	(-1.17, -0.12)	0.02	0.68
	miR-744-3p	0.35	(0.06, 0.64)	0.02	0.68
	miR-181a-2-3p	0.54	(0.10, 0.99)	0.02	0.68
	miR-10a-5p	0.42	(0.07, 0.77)	0.02	0.68
	miR-532-5p	0.53	(0.08, 0.98)	0.02	0.68
	miR-135b-5p	1.02	(0.14, 1.89)	0.02	0.68
	miR-184	-0.62	(-1.15, -0.08)	0.02	0.68
	miR-502-5p	0.54	(0.05, 1.03)	0.03	0.80
	miR-502-3p	0.55	(0.05, 1.06)	0.03	0.80
	miR-1226-5p	-0.49	(-0.94, -0.03)	0.04	0.80
	miR-106b-5p	0.37	(0.02, 0.72)	0.04	0.80
	miR-494-3p	-0.29	(-0.56, -0.01)	0.04	0.90
	miR-30a-3p	0.38	(0.00, 0.75)	0.05	0.91
MHiBP	miR-10a-5p	0.58	(0.23, 0.93)	0.002	0.61
	miR-30a-3p	0.53	(0.15, 0.90)	0.007	0.75
	miR-154-3p	-0.71	(-1.24, -0.17)	0.01	0.75
	miR-744-3p	0.39	(0.09, 0.69)	0.01	0.75
	miR-7-2-3p	0.67	(0.16, 1.19)	0.01	0.75

	miR-660-5p	0.64	(0.14, 1.13)	0.01	0.75
	miR-532-5p	0.59	(0.12, 1.06)	0.01	0.75
	miR-501-5p	0.47	(0.08, 0.85)	0.02	0.75
	miR-502-5p	0.62	(0.11, 1.13)	0.02	0.75
	miR-184	-0.67	(-1.23, -0.11)	0.02	0.75
	miR-181a-2-3p	0.55	(0.08, 1.02)	0.02	0.81
	miR-502-3p	0.61	(0.07, 1.14)	0.03	0.81
	miR-218-5p	0.57	(0.07, 1.07)	0.03	0.81
	miR-1179	0.77	(0.04, 1.49)	0.04	0.91
	miR-191-3p	0.45	(0.02, 0.88)	0.04	0.91
	miR-532-3p	0.49	(0.02, 0.95)	0.04	0.91
	miR-500a-5p	0.55	(0.01, 1.08)	0.04	0.91
	miR-378a-5p	-0.90	(-1.77, -0.02)	0.05	0.91
	miR-362-5p	0.64	(0.01, 1.28)	0.05	0.91
	miR-15a-3p	0.43	(0.01, 0.86)	0.05	0.91
MBzP	miR-1227-3p	0.30	(0.03, 0.57)	0.03	1.00
	miR-494-3p	-0.19	(-0.38, -0.01)	0.04	1.00
MCPP	miR-154-5p	1.27	(0.61, 1.93)	0.0004	0.15
	miR-7-5p	0.54	(0.19, 0.90)	0.004	0.54
	miR-659-3p	0.37	(0.12, 0.63)	0.005	0.54
	miR-142-5p	0.36	(0.11, 0.61)	0.006	0.54
	miR-545-5p	0.45	(0.12, 0.77)	0.009	0.54
	miR-30d-3p	0.24	(0.06, 0.42)	0.01	0.54
	miR-483-5p	-0.46	(-0.81, -0.11)	0.01	0.54
	miR-337-5p	0.95	(0.22, 1.68)	0.01	0.54
	miR-429	0.58	(0.13, 1.03)	0.01	0.54
	miR-144-5p	0.55	(0.11, 0.99)	0.02	0.61
	miR-10a-3p	0.30	(0.05, 0.54)	0.02	0.61
	miR-548J-5p	0.79	(0.14, 1.43)	0.02	0.61
	miR-21-3p	-0.28	(-0.53, -0.04)	0.02	0.70
	miR-182-5p	0.69	(0.09, 1.30)	0.03	0.70
	miR-629-3p	0.19	(0.02, 0.36)	0.03	0.70
	miR-495-3p	0.46	(0.05, 0.88)	0.03	0.72
	miR-376a-3p	0.34	(0.03, 0.66)	0.03	0.74
	miR-592	-0.39	(-0.76, -0.03)	0.03	0.75
	miR-449b-5p	0.35	(0.01, 0.68)	0.04	0.81
	miR-10a-5p	0.23	(0.01, 0.45)	0.04	0.81
	miR-720	-0.36	(-0.70, -0.01)	0.04	0.81
	miR-886-5p	-0.36	(-0.72, -0.01)	0.05	0.81
MCOP	miR-21-3p	-0.29	(-0.47, -0.12)	0.002	0.35

	miR-582-3p	-0.28	(-0.45, -0.11)	0.002	0.35
	miR-449b-5p	0.37	(0.13, 0.62)	0.004	0.46
	miR-601	-0.58	(-1.03, -0.13)	0.01	0.69
	miR-154-3p	-0.32	(-0.57, -0.07)	0.01	0.69
	miR-154-5p	0.72	(0.16, 1.28)	0.01	0.69
	miR-720	-0.32	(-0.58, -0.07)	0.01	0.69
	miR-375-3p	0.37	(0.07, 0.66)	0.02	0.69
	miR-629-3p	0.16	(0.03, 0.28)	0.02	0.69
	miR-7-2-3p	0.30	(0.06, 0.54)	0.02	0.69
	miR-449a	0.42	(0.06, 0.79)	0.02	0.79
	miR-577	0.41	(0.06, 0.76)	0.02	0.79
	miR-142-5p	0.22	(0.02, 0.42)	0.04	0.80
	miR-592	-0.30	(-0.59, -0.02)	0.04	0.80
	miR-182-5p	0.50	(0.03, 0.97)	0.04	0.80
	miR-886-3p	-0.30	(-0.59, -0.01)	0.04	0.80
	miR-144-5p	0.37	(0.01, 0.72)	0.04	0.80
	miR-7-5p	0.29	(0.01, 0.58)	0.05	0.80
	miR-181c-3p	-0.13	(-0.26, 0.00)	0.05	0.80
	miR-137-3p	-0.37	(-0.74, 0.00)	0.05	0.80
MCNP	miR-590-3p	0.70	(0.27, 1.14)	0.002	0.87
	miR-154-5p	1.15	(0.34, 1.96)	0.007	0.87
	miR-10a-3p	0.38	(0.11, 0.66)	0.008	0.87
	miR-339-5p	0.31	(0.08, 0.53)	0.009	0.87
	miR-601	-0.84	(-1.51, -0.18)	0.01	0.87
	miR-629-3p	0.24	(0.05, 0.42)	0.02	0.87
	miR-944	0.61	(0.11, 1.11)	0.02	0.87
	miR-449b-5p	0.46	(0.08, 0.83)	0.02	0.87
	miR-708-5p	-0.40	(-0.73, -0.06)	0.02	0.92
	miR-21-3p	-0.32	(-0.59, -0.04)	0.03	0.92
	miR-592	-0.47	(-0.88, -0.05)	0.03	0.92
	miR-628-3p	0.26	(0.03, 0.49)	0.03	0.92
	miR-342-5p	0.46	(0.04, 0.87)	0.03	0.92
	miR-1180-3p	0.34	(0.02, 0.66)	0.04	0.92
	miR-376b-3p	-0.28	(-0.55, -0.02)	0.04	0.92
	miR-720	-0.40	(-0.79, -0.02)	0.04	0.92
	miR-582-3p	-0.27	(-0.53, -0.01)	0.04	0.92
	miR-370-3p	0.18	(0.01, 0.36)	0.04	0.92
	miR-150-5p	0.35	(0.01, 0.69)	0.05	0.93
MEHP	miR-635	0.70	(0.27, 1.14)	0.002	0.67
	miR-548c-5p	0.46	(0.14, 0.79)	0.006	0.67

	miR-337-3p	-0.41	(-0.70, -0.11)	0.008	0.67
	miR-380-5p	0.51	(0.14, 0.88)	0.009	0.67
	miR-548d-5p	0.42	(0.11, 0.74)	0.01	0.67
	miR-24-3p	-0.24	(-0.42, -0.06)	0.01	0.67
	miR-128-3p	-0.47	(-0.83, -0.11)	0.01	0.67
	miR-181c-3p	-0.28	(-0.51, -0.06)	0.02	0.75
	miR-548L	0.53	(0.07, 0.99)	0.03	0.90
	miR-485-3p	-0.51	(-0.97, -0.06)	0.03	0.90
	miR-182-5p	0.93	(0.08, 1.79)	0.03	0.90
	miR-888-5p	1.26	(0.10, 2.43)	0.03	0.90
	miR-564	1.44	(0.11, 2.78)	0.03	0.90
	miR-659-3p	0.48	(0.04, 0.92)	0.03	0.90
	miR-484	-0.54	(-1.05, -0.04)	0.04	0.90
	miR-16-5p	-0.38	(-0.73, -0.02)	0.04	0.90
	miR-577	0.66	(0.01, 1.32)	0.05	0.90
	miR-154-5p	1.05	(0.01, 2.10)	0.05	0.90
	miR-92a-1-5p	0.34	(0.00, 0.69)	0.05	0.90
MEHHP	miR-577	1.06	(0.53, 1.59)	0.0003	0.10
	miR-1179	0.89	(0.37, 1.41)	0.001	0.23
	miR-7-2-3p	0.61	(0.25, 0.98)	0.002	0.23
	miR-192-3p	0.48	(0.18, 0.78)	0.003	0.28
	miR-7-5p	0.65	(0.22, 1.09)	0.004	0.32
	miR-616-5p	0.25	(0.07, 0.43)	0.008	0.50
	miR-572	-0.45	(-0.79, -0.11)	0.01	0.60
	miR-106b-5p	0.35	(0.07, 0.63)	0.02	0.60
	miR-887-3p	0.33	(0.06, 0.60)	0.02	0.60
	miR-744-3p	0.28	(0.05, 0.52)	0.02	0.60
	miR-26b-3p	0.40	(0.06, 0.74)	0.02	0.60
	miR-627-5p	0.40	(0.06, 0.74)	0.02	0.60
	miR-193a-3p	0.57	(0.07, 1.07)	0.03	0.60
	miR-218-5p	0.44	(0.05, 0.83)	0.03	0.60
	let-7i-3p	0.45	(0.06, 0.85)	0.03	0.60
	miR-99a-3p	0.52	(0.06, 0.99)	0.03	0.60
	miR-1274B	-0.38	(-0.72, -0.05)	0.03	0.60
	miR-601	-0.87	(-1.65, -0.10)	0.03	0.60
	miR-20b-5p	0.27	(0.03, 0.51)	0.03	0.62
	miR-545-5p	0.48	(0.04, 0.93)	0.03	0.62
	miR-93-5p	0.27	(0.02, 0.52)	0.04	0.62
	miR-10b-5p	0.40	(0.02, 0.78)	0.04	0.62
	miR-194-5p	0.18	(0.01, 0.36)	0.04	0.62

	miR-570-3p	0.26	(0.01, 0.51)	0.04	0.62
	miR-338-5p	1.16	(0.04, 2.27)	0.04	0.62
	miR-542-5p	0.38	(0.01, 0.75)	0.04	0.62
	miR-335-3p	0.49	(0.02, 0.96)	0.04	0.62
	miR-659-3p	0.38	(0.01, 0.74)	0.05	0.65
MEOHP	miR-1179	0.85	(0.37, 1.33)	0.001	0.27
	miR-577	0.88	(0.36, 1.40)	0.002	0.27
	miR-572	-0.50	(-0.81, -0.19)	0.002	0.27
	miR-26b-3p	0.47	(0.16, 0.77)	0.004	0.29
	miR-7-5p	0.62	(0.22, 1.03)	0.004	0.29
	miR-20b-5p	0.32	(0.10, 0.54)	0.005	0.29
	miR-7-2-3p	0.53	(0.17, 0.88)	0.005	0.29
	miR-93-5p	0.32	(0.10, 0.55)	0.006	0.29
	miR-192-3p	0.41	(0.12, 0.70)	0.007	0.32
	miR-106b-5p	0.35	(0.09, 0.61)	0.009	0.33
	miR-93-3p	0.40	(0.10, 0.70)	0.01	0.34
	miR-18a-3p	0.45	(0.11, 0.78)	0.01	0.34
	miR-99a-3p	0.55	(0.13, 0.97)	0.01	0.37
	miR-887-3p	0.32	(0.07, 0.58)	0.01	0.37
	miR-10b-5p	0.44	(0.09, 0.78)	0.02	0.39
	miR-191-3p	0.37	(0.06, 0.67)	0.02	0.44
	miR-30a-3p	0.33	(0.06, 0.61)	0.02	0.44
	miR-744-3p	0.26	(0.04, 0.48)	0.02	0.44
	miR-194-5p	0.19	(0.03, 0.35)	0.02	0.45
	miR-616-5p	0.20	(0.03, 0.38)	0.03	0.49
	miR-218-5p	0.40	(0.04, 0.76)	0.03	0.54
	miR-30d-3p	0.25	(0.02, 0.48)	0.03	0.54
	miR-26a-1-3p	0.48	(0.04, 0.92)	0.03	0.54
	miR-601	-0.79	(-1.51, -0.06)	0.04	0.57
	miR-769-5p	0.23	(0.01, 0.44)	0.04	0.59
	miR-335-3p	0.46	(0.02, 0.91)	0.04	0.59
	miR-181a-2-3p	0.36	(0.01, 0.70)	0.04	0.60
	miR-106b-3p	0.33	(0.01, 0.64)	0.04	0.60
MECPP	miR-577	1.01	(0.41, 1.62)	0.002	0.61
	miR-93-5p	0.39	(0.13, 0.65)	0.004	0.62
	miR-106b-5p	0.44	(0.14, 0.74)	0.005	0.62
	miR-7-5p	0.66	(0.16, 1.16)	0.01	0.71
	miR-1179	0.79	(0.18, 1.40)	0.01	0.71
	miR-572	-0.47	(-0.85, -0.09)	0.02	0.71
	miR-10b-5p	0.50	(0.09, 0.90)	0.02	0.71

	miR-106b-3p	0.45	(0.08, 0.82)	0.02	0.71
	miR-27b-5p	0.46	(0.07, 0.85)	0.02	0.71
	miR-20b-5p	0.31	(0.04, 0.57)	0.02	0.71
	miR-26b-3p	0.43	(0.05, 0.81)	0.03	0.71
	miR-21-3p	-0.37	(-0.71, -0.04)	0.03	0.71
	miR-1260a	-0.43	(-0.83, -0.04)	0.03	0.71
	miR-542-3p	0.54	(0.05, 1.03)	0.03	0.71
	miR-30d-3p	0.29	(0.03, 0.55)	0.03	0.71
	miR-192-3p	0.39	(0.03, 0.75)	0.04	0.71
	miR-99a-3p	0.54	(0.02, 1.05)	0.04	0.71
	miR-758-3p	1.35	(0.03, 2.67)	0.05	0.71
	miR-29c-3p	0.39	(0.00, 0.78)	0.05	0.71
	miR-30a-3p	0.33	(0.00, 0.66)	0.05	0.71
	miR-27b-3p	0.50	(0.00, 1.00)	0.05	0.71
ΣDEHP	miR-577	1.13	(0.53, 1.72)	0.0004	0.17
	miR-1179	0.92	(0.33, 1.51)	0.003	0.42
	miR-572	-0.55	(-0.92, -0.18)	0.005	0.42
	miR-106b	0.44	(0.14, 0.74)	0.005	0.42
	miR-93-5p	0.38	(0.12, 0.64)	0.006	0.42
	miR-7-5p	0.70	(0.21, 1.19)	0.007	0.42
	miR-26b-3p	0.49	(0.12, 0.87)	0.01	0.51
	miR-192-3p	0.46	(0.11, 0.81)	0.01	0.51
	miR-20b-5p	0.34	(0.08, 0.60)	0.01	0.51
	miR-10b-5p	0.52	(0.12, 0.93)	0.01	0.51
	miR-7-2-3p	0.56	(0.11, 1.01)	0.02	0.54
	miR-99a-3p	0.61	(0.11, 1.12)	0.02	0.60
	miR-887-3p	0.35	(0.05, 0.66)	0.02	0.71
	miR-542-3p	0.56	(0.07, 1.05)	0.03	0.71
	miR-106b*	0.42	(0.04, 0.79)	0.03	0.71
	miR-194-5p	0.21	(0.01, 0.40)	0.04	0.71
	miR-29a-3p	0.54	(0.04, 1.04)	0.04	0.71
	miR-27b-5p	0.42	(0.03, 0.82)	0.04	0.71
	miR-18a-3p	0.43	(0.03, 0.84)	0.04	0.71
	miR-30d-3p	0.28	(0.01, 0.55)	0.04	0.71
	miR-485-3p	-0.46	(-0.90, -0.02)	0.04	0.71
	miR-29c-3p	0.40	(0.01, 0.79)	0.05	0.71
	miR-135a-5p	0.90	(0.01, 1.80)	0.05	0.71
ΣAA	miR-7-5p	0.80	(0.31, 1.29)	0.002	0.35
Phthalates	miR-7-2-3p	0.68	(0.26, 1.10)	0.003	0.35

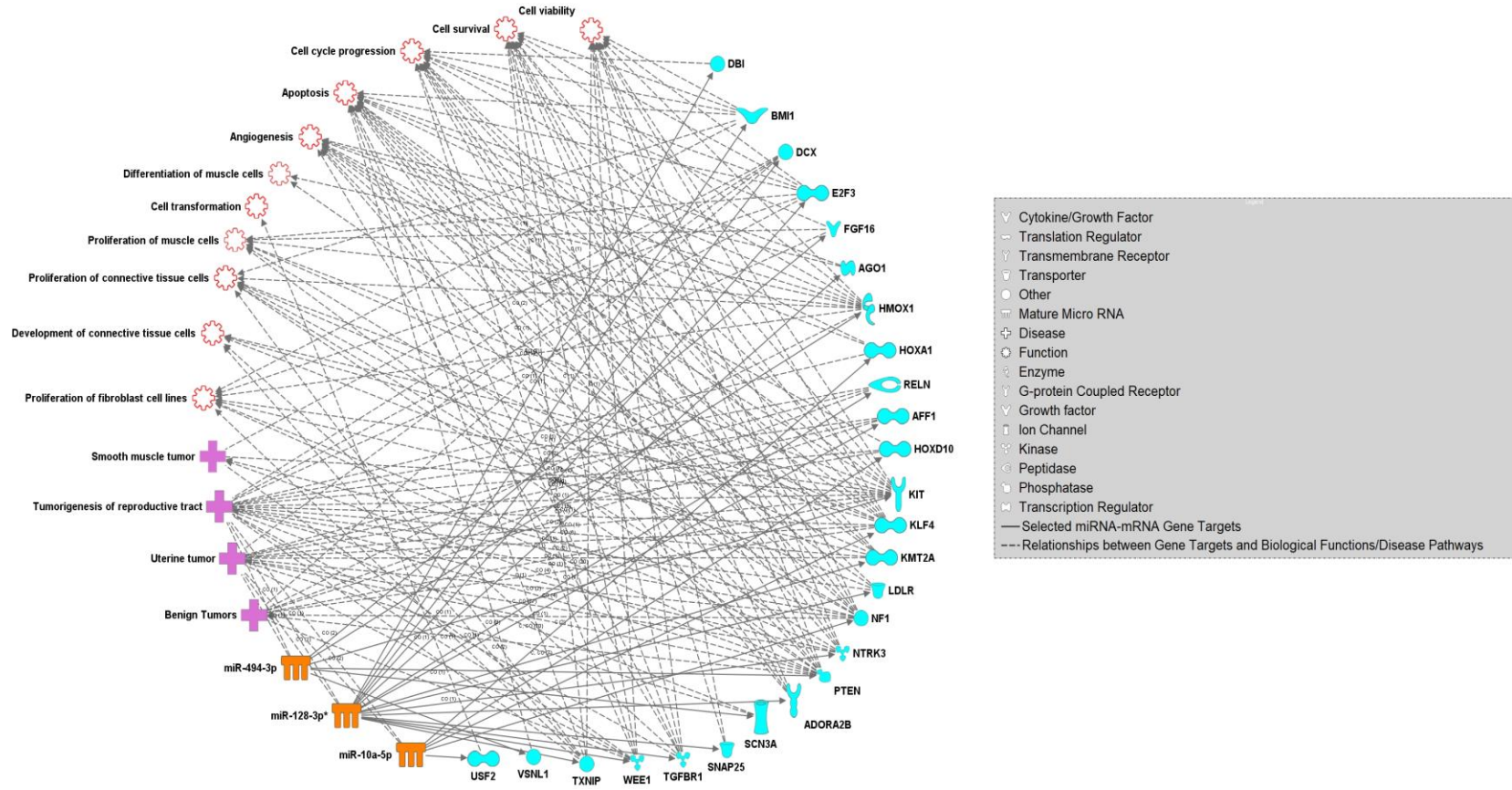
miR-577	0.97	(0.36, 1.59)	0.003	0.35
miR-572	-0.56	(-0.93, -0.20)	0.004	0.35
miR-1179	0.85	(0.26, 1.43)	0.006	0.45
miR-21-3p	-0.41	(-0.74, -0.08)	0.02	0.92
miR-483-5p	-0.58	(-1.08, -0.07)	0.03	0.92
miR-106b-5p	0.34	(0.03, 0.65)	0.03	0.92
miR-363-3p	0.36	(0.03, 0.70)	0.03	0.92
miR-18a-3p	0.41	(0.00, 0.82)	0.05	0.92
miR-520d-3p	-2.09	(-4.17, -0.01)	0.05	0.92

^aAssociations at $p < 0.05$ are shown. All associations are adjusted for age, BMI, and race/ethnicity. Lower ΔC_q indicates higher relative miRNA expression.

^bFDR q-values were calculated separately for each phthalate biomarker using Benjamini-Hochberg procedure.

Figure S1. Pathway analysis illustrating the link between phthalate-associated miRNAs in fibroid tissue and biological function and disease pathways related to fibroid pathogenesis.

Fibroid-specific pathways_2019.03.15v2



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