

Supplementary Materials: Acetylated DNMT1 Downregulation and Related Regulatory Factors Influence Metastatic Melanoma Patients Survival

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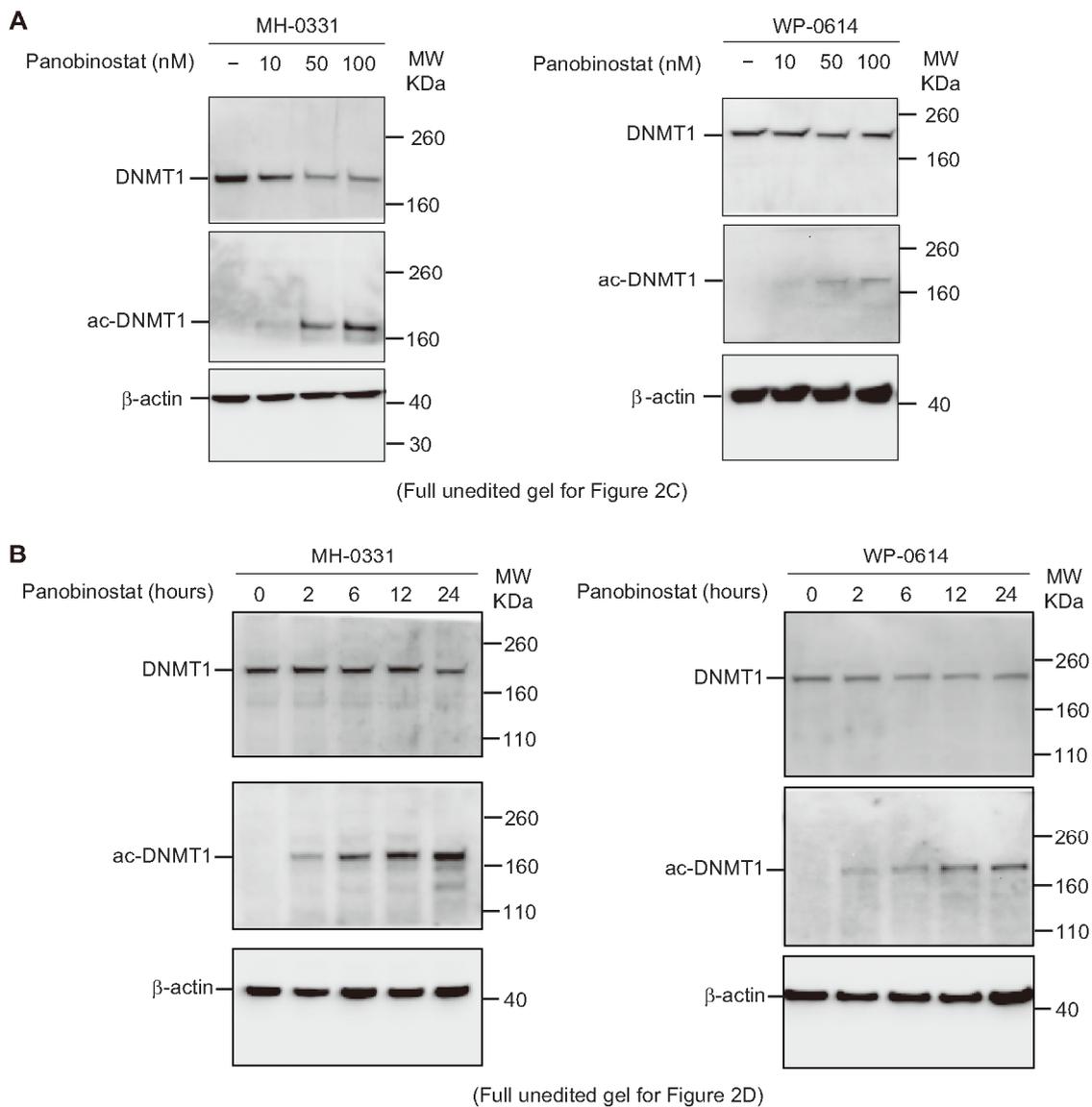


Figure S1. Uncropped western blot images for **Figures 2C and D.**

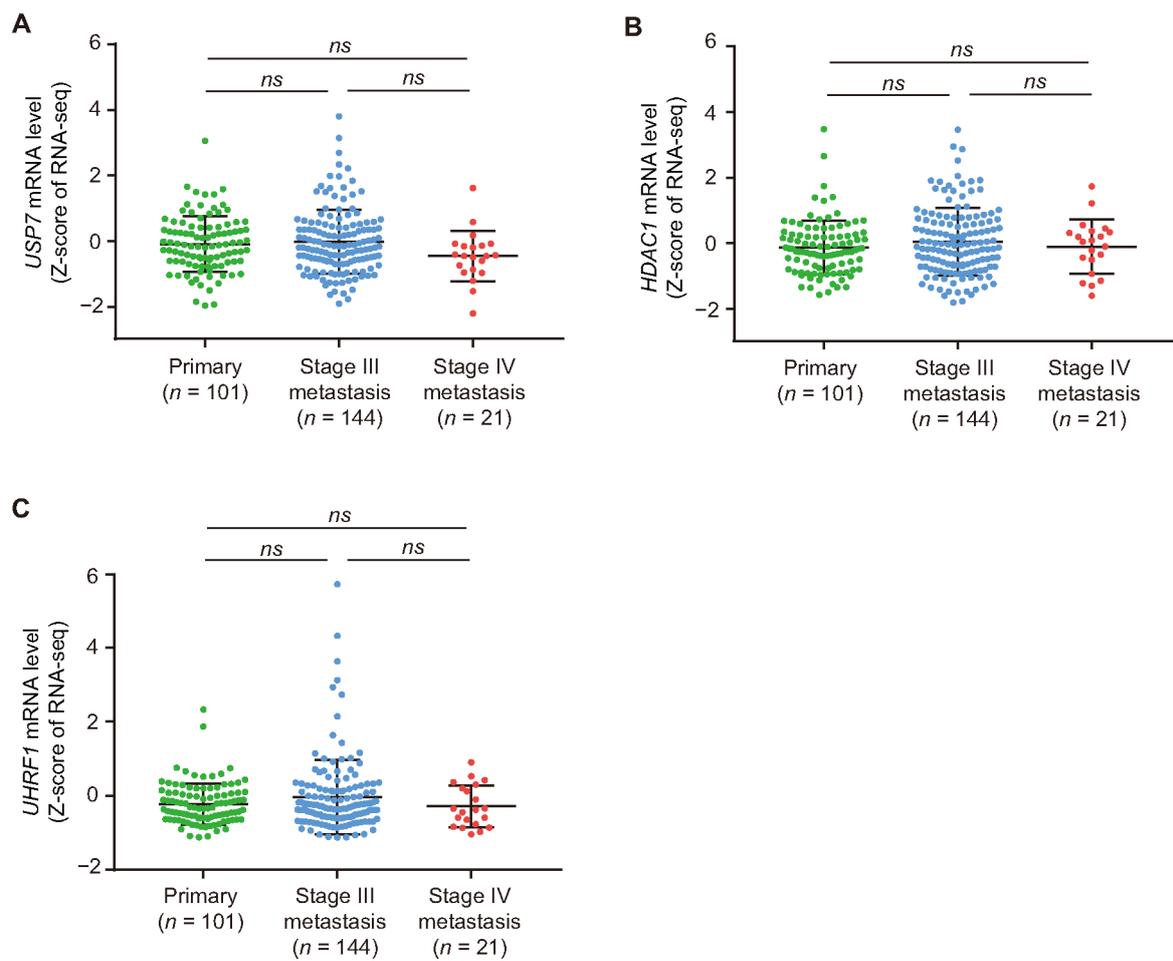


Figure S2. Comparison of *USP7* (A) *HDAC1* (B) *UHRF1* (C) mRNA expression in primary, stage III, and stage IV metastatic melanoma from TCGA SKCM dataset. Data represent the mean \pm SD. *ns*: not significant.

Table S1. Clinicopathological characteristics and H-score values detected by IHC for stage IV melanoma patients.

| Variable | Factor | Number of cases (%) |
|----------------------------------|--------------|---------------------|
| Age (years) | <60 | 76 (54) |
| | ≥60 | 65 (46) |
| Gender | Male | 99 (70) |
| | Female | 42 (30) |
| Organ site | Bowel | 36 (26) |
| | Lung | 26 (18) |
| | Distant skin | 20 (14) |
| | Others | 59 (42) |
| M stage ¹ | M1a | 26 (18) |
| | M1b | 18 (13) |
| | M1c | 67 (48) |
| | M1d | 25 (18) |
| | NA | 5 (3) |
| Survival status | Alive | 24 (17) |
| | Expired | 117 (83) |
| Ac-DNMT1 H-score (cutoff = mean) | Low | 82 (58) |
| | High | 59 (42) |
| DNMT1 H-score (cutoff = mean) | Low | 57 (40) |
| | High | 84 (60) |
| TIP60 H-score (cutoff = mean) | Low | 82 (58) |
| | High | 59 (42) |
| USP7 H-score (cutoff = mean) | Low | 76 (54) |
| | High | 65 (46) |

¹ AJCC 8th Edition.

Table S2. Associations between clinicopathological characteristics and H-score values detected by IHC for stage IV melanoma patients.

| Variable | Factor | ac-DNMT1 | | | DNMT1 | | | TIP60 | | | USP7 | | |
|-----------------|--------------|-----------|------------|-----------------|-----------|------------|-----------------|-----------|------------|-----------------|-----------|------------|-----------------|
| | | Low cases | High cases | <i>p</i> -value | Low cases | High cases | <i>p</i> -value | Low cases | High cases | <i>p</i> -value | Low cases | High cases | <i>p</i> -value |
| Age (years) | <60 | 48 | 28 | 0.193 | 29 | 47 | 0.553 | 46 | 30 | 0.537 | 44 | 32 | 0.304 |
| | ≥60 | 34 | 31 | | 28 | 37 | | 36 | 29 | | 32 | 33 | |
| Gender | Male | 56 | 43 | 0.557 | 38 | 61 | 0.448 | 50 | 49 | 0.005 | 48 | 51 | 0.048 |
| | Female | 26 | 16 | | 19 | 23 | | 32 | 10 | | 28 | 14 | |
| Organ site | Bowel | 23 | 13 | 0.348 | 12 | 24 | 0.025 | 24 | 12 | 0.601 | 21 | 15 | 0.235 |
| | Lung | 12 | 14 | | 17 | 9 | | 15 | 11 | | 17 | 9 | |
| | Distant skin | 14 | 6 | | 9 | 11 | | 12 | 8 | | 12 | 8 | |
| M stage | Others | 33 | 26 | | 19 | 40 | | 31 | 28 | | 26 | 33 | |
| | M1a | 18 | 8 | 0.349 | 12 | 14 | 0.212 | 18 | 8 | 0.425 | 15 | 11 | 0.771 |
| | M1b | 8 | 10 | | 11 | 7 | | 8 | 10 | | 10 | 8 | |
| | M1c | 37 | 30 | | 25 | 42 | | 38 | 29 | | 33 | 34 | |
| | M1d | 16 | 9 | | 8 | 17 | | 15 | 10 | | 15 | 10 | |
| Survival status | NA | 5 | | | | | | | | | | | |
| | Alive | 8 | 16 | 0.007 | 8 | 16 | 0.437 | 12 | 12 | 0.374 | 9 | 15 | 0.077 |
| | Expired | 74 | 43 | | 49 | 68 | | 70 | 47 | | 67 | 50 | |